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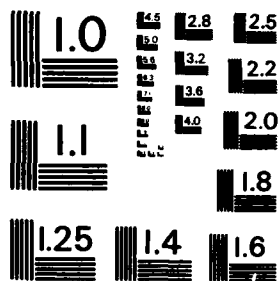
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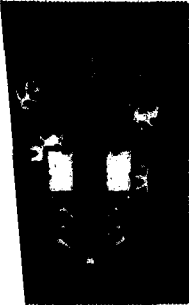
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**RSRE
MEMORANDUM No. 3543**

**ROYAL SIGNALS & RADAR
ESTABLISHMENT**

EYE MOVEMENTS AND VISUAL SEARCH: A BIBLIOGRAPHY

Authors: K T Carr, E D Megaw
P J Gellman

**PROCUREMENT EXECUTIVE,
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ROYAL SIGNALS AND RADAR ESTABLISHMENT

Memorandum 3543

TITLE: EYE MOVEMENTS AND VISUAL SEARCH: A BIBLIOGRAPHY

AUTHORS: K T Carr, E D Megaw, P J Goillau

DATE: January 1983

SUMMARY

Over 700 references describing past work related to eye movements and visual search are listed and qualified using a keyword system. The bibliography is intended as the starting point for a research programme on visual search for military targets viewed through electro-optical imaging systems.

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EYE MOVEMENTS AND VISUAL SEARCH : A BIBLIOGRAPHY

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INTRODUCTION

This memorandum comprises the first output from an RSRE Research Agreement with Birmingham University, Department of Engineering Production. The resources of the Ergonomics Information Analysis Centre (EIAC) at Birmingham, together with INSPEC, US Government Reports Abstracts, and the Defence Research Information Centre (DRIC) have been used to abstract past work on Eye Movements, Strategies, and Visual Search.

Each reference listed is qualified by one or more Keywords, forming a comprehensive cross-reference system. It is intended that this bibliography will form the starting point for a co-ordinated research programme on visual search for military targets, specifically through electro-optical imaging systems.

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2. KEY WORD DEFINITIONS

ABN: 'Abnormal'. Includes effects on eye movements and vision of physiological and psychological disorders, of drug induced states and voluntarily self-imposed abnormal eye movements.

AID: 'Aids for visual tasks'. Equipment and technique.

AIR: 'Air-to-ground visual search'.

ATT: 'Attention'. Physiological and psychological definitions; visual attention.
See also VIG, PSY

BOK: 'Book', wholly or partially concerned with vision, unless otherwise specified.

CAM: 'Camouflage'. Includes embedded figures and targets, military camouflage.

CTL: 'Control of eye movements in mathematical or engineering terms'. Includes biocybernetics, bioengineering, artificial intelligence and control system concepts.
See also PSY, PHY

CXT: 'Context', verbal and pictorial.

DEV: 'Developmental studies'. Babies, children, age comparisons and ontogenetic development.

EOD: 'Electro-optic display'. Visual tasks using an electro-optic display; ergonomic design.

EYM: 'Eye movements'. A global term covering all literature concerned with eye movements of any kind. Includes topics described by SAC and INV.

FAT: 'Fatigue'. Physiological and psychological definitions.

See also VIG.

FIX: 'Fixation'.

FOR: 'Form, pattern and shape perception'.

FOV: 'Foveal vision'. Includes foveal acuity, visual resolution.

FRE: 'Free search'.

HDM: 'Head movements'.

IMQ: 'Image quality'. Objective measures.

IND: 'Individual differences'. Inter-subject variance in vision and visual task performance.

INS: 'Instrumentation'.

INT: 'Interaction of stimuli in perceptual processes'. Includes backward and forward masking, lateral inhibition, interference and illusions.

INV: 'Involuntary eye movements'. Includes fixation eye movements, drifts, microsaccades, tremor, convergent and fusional eye movements.

MEM: 'Memory'. Iconic, short and long term memory.
See also PSY.

MET: 'Method'. Experimental design, rationale and procedure.

MOD: 'Model'. Empirical, theoretical, applied, and general models of visual performance.

PER: 'Peripheral vision'. Includes peripheral acuity, target location, visual orienting reflex, functional visual field, visual lobe.

PHY: 'Physiology'. Including neurophysiology.

PIC: 'Picture viewing'. Perception of realistic, meaningful scenes.

See also REA, RED.

PSP: 'Psychophysics'.

PSY: 'Psychology'. Wholistic cognitive approaches to visual perception.

See also CTL, MEM, ATT, DEV.

REA: 'Real world images and visual tasks'.

REC: 'Recognition'. Includes identification.

RED: 'Reading'. Includes single letter, or word targets.

REV: 'Review'.

SAC: 'Saccades'.

See also INV, EYM.

STR: 'Strategies for eye movements in visual search'.

TAC: 'Tachistoscope'. Brief or limited exposure of the image.

TAQ: 'Target acquisition'. Non-search visual tasks involving a target.

TCH: 'Target characteristic'. Includes colour, movement, shape, size, orientation, etc.

THR: 'Threshold performance of visual perception'.

See also PSP.

TRA: 'Training in visual perception'. Includes practice.

VIG: 'Vigilance tasks'.

VIS: 'Visual search'.

3. KEY WORD INDEXES

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4. REFERENCES

- 1 Abadi, R.V.; Carden, D.; Simpson, J. Controlling abnormal eye movements. Vision Research, 1979, 19, 961-963.
EYM, ABN
- 2 Abrams, S.G.; Zuber, E.L. Some temporal characteristics of information processing during reading. Reading Research Quarterly, 1972, 8, 40-51.
PSY, RED
- 3 Adler, F.H.; Fliegelman, M. Influence of fixation on the visual acuity. Archives of Ophthalmology 1934, Vol. 13, p.475-483.
FIX, FOV
- 4 Algazi, V.R.; Ford, G.E. Quality measures in the processing of high-contrast images....based on vision psychophysics model. In: Advances in Image Transmission II, Proceedings of the Seminar, San Diego, C.A., July 31-August 1 1980, p.54-60. Instrumentation Engineers, 1980.
IMQ, PSP
- 5 Allan, M.D. Training in perceptual skills. Occupational Psychology, 1957, 31, 113-119.
TRA
- 6 Allan, M.D. Learning perceptual skills: The Sargeant system of recognition training. Occupational Psychology, 1958, 32, 245-252.
TRA, REC
- 7 Ananin, U.F. Involuntary saccadic eye movement - a biological information modulation in the visual process. Probl. Bioniki, 1975, 14, 47-51. (In Russian).
INV, CTL, EYM
- 8 Ananin, U.F. The visual system as a biological multicircuit interconnected control system. Probl. Bioniki, 1977, 19, 19-27. (In Russian).
MOD, CTL
- 9 Andriessen, J.J.; Bouma, H. Just noticeable differences in slant of test lines as a function of retinal eccentricity. IPO Annual Progress Report, 1970, 5, 110-113.
PSP, PER, TCH

- 10 Andriessen, J.J.; de Voogd, A.H. Analysis of eye movement patterns in silent reading. IPO Annual Progress Report, 1973, 8, 29-34.
EYM, STR, RED
- 11 Anliker, J.; Floyd, R.; Merf, M.; Kailatu, T. Biocybernetic Factors in Human Perception and Memory. Stanford University, California, Information Systems Laboratory. Final Report no. ISL-BIOCYB-77, July 1977.
CTL, MEM
- 12 Annett, J. Sonar recognition training: An investigation of whole versus part and analytic versus synthetic procedures. Technical Report No. 67-C-0105-1, 1971, US Naval Training Device Center, Orlando.
TRA, REC
- 13 Anstis, S.M. A chart demonstrating variation in acuity with retinal position. Vision Research, 1974, Vol. 14, p.589.
PER
- 14 Antes, J.R. The time course of picture viewing. Journal of Experimental Psychology, 1974, 103, 62-70.
EYM, FRE, PIC
- 15 Antes, J.R. Recognizing and localizing features in brief picture presentations. Memory and Cognition, 1977, 5, 155-161.
REC, PIC, TAC
- 16 Antes, J.R.; Metzger, R.L. Influences of picture context on object recognition. Acta Psychologica, 1980, 44, 21-30.
PIC, CXT, REC
- 17 Armington, J.C.; Bloom, M.B. Relations between the amplitudes of spontaneous saccades and visual responses. Journal of the Optical Society of America, 1974, 64, 1263-71.
EYM, SAC
- 18 Armington, J.C.; Krauskopf, J.J.; Wooten, B.R. (Eds.) Visual Psychophysics: Its Physiological Basis. Academic Press, New York: 1978.
PSP, PHY, BOK
- 19 Arteneva, E. YU.; Khomskaya, E.D. The reproduction of a set rhythm of eye movements from memory. Royal Aircraft Establishment, Farnborough, England, Report No. RAE-LIB-TRANS-1288. February, 1968. (Translated from Vopr. Psikhologii (Moscow), 1965, 6, 110-114).
EYM, MEM, STR

- 20 Attneave, F. Some informational aspects of visual perception. Psychological Review, 1954, 61, 183-193.
PSY
- 21 Averbach, E.; Coriell, A.S. Short-term memory in vision. The Bell System Technical Journal, 1961, 40, 309-328.
MEM, MAS
- 22 Bach-y-rita, P.; Collins, C.C. (Eds.) The control of eye movements. New York: Academic Press, 1971.
EYM, EOK
- 23 Bahill, A.T. Neurological control and the hyperfine structure of saccadic eye movements. University of California Berkeley, Doctoral Dissertation for Department of Electrical Engineering and Computer Science, 1975.
PHY, SAC, EYM
- 24 Bahill, A.T. Development, validation and sensitivity analyses of human eye movement models. CRC Critical Review of Bioengineering, 1980, 4, 311-55.
EYM, MOD, CTL, REV
- 25 Bahill, A.T. Most naturally occurring human saccades have magnitudes of 15 degrees or less. Investigative Ophthalmology, 1975, 14, 468-469.
SAC, EYM
- 26 Bahill, A.T.; Bahill, K.A.; Clark, M.R.; Stark, L. Closely spaced saccades. Investigative Ophthalmology, 1975, 14, 317.
EYM, SAC
- 27 Bahill, A.T.; Brockenbrough, A.; Troost, B.T. Variability and development of a normative data base for saccadic eye movements. Investigative Ophthalmology and Visual Science, 1981, 21, 116-125.
EYM, SAC
- 28 Bahill, A.T.; Clark, M.R.; Stark, L. Dynamic over-shoot in saccadic eye movements is caused by neurological control signal reversals. Experimental Neurology, 1975, 48, 107.
EYM, SAC, PHY
- 29 Bahill, A.T.; Latimer, J.R.; Troost, B.T. Linear homeomorphic model for human movement. IEEE Transcripts on Biomedical Engineering, 1980, BME-27, 631-9.
EYM, MOD, CTL
- 30 Bahill, A.T., Stark, L. Overlapping saccades and glissades are produced by fatigue in the saccadic eye movement system. Experimental Neurology, 1975, 48, 95.
EYM, SAC, INV, FAT, PHY

- 31 Bahill, A.T., Stark, L. The Trajectories of Saccadic Eye Movements. Scientific American, 1979, 240, 84-93.
EYM, SAC, STR
- 32 Bahill, A.T., Troost, B.T. Types of saccadic eye movements. Neurology, 1979, 19, 1150-1152.
EYM, SAC
- 33 Bailey, H.H. Target Acquisition - Visual Recognition: An early Model. Rand Corporation, Santa Monica, CA, Report No. P-4918, September 1972.
TAQ, REC, EOD, MOD, CTL
- 34 Bain, A. The senses and the intellect. London: Longmans, Green, 1855.
PSY, BOK
- 35 Baker, C.H. Attention to visual displays during a vigilance task. I. Biasing attention. British Journal of Psychology, 1958, 49, p.279-288.
ATT, EOD, VIG
- 36 Baker, M.A.; Loeb, M. Implications of measurement eye fixations for a psychophysics of form perception Perception and Psychophysics, 1973, 13, 185-192.
FIX, PSP, FOR
- 37 Baker, R., Bertlitz, A. (Eds.) Control of gaze by brain stem neurons. Amsterdam: Elsevier/North Holland Press, 1977.
PHY
- 38 Baldwin, R.D. Attempts to improve visual detection through use of search patterns and optical aids. Human Resources Research Organisation, Alexandria, VA, Report No. HUMRRO-TR-73-3, February 1973.
EYM, VIS, STR, AID
- 39 Baloh, R.W.; Sills, A.W.; Kumley, W.E.; Honrubia, V. Quantitative measurement of saccade amplitude, duration and velocity. Neurology, 1975, 25, 1065-1070.
EYM, SAC
- 40 Bard, C.; Fleury, M.; Carriere, L.; Halle, M. Analysis of Gymnastics Judges' Visual Search. Research Quarterly for Exercise and Sport, 1980, 51, 267-273.
EYM, VIS
- 41 Barlow, D.E. Human cervico-ocular reflex in the presence of a visual stimulus. IEEE Transcripts of Biomedical Engineering, 1981, Vol. BME-28, No. 4, p.364-6.
EYM, PHY

- 42 Barlow, J.S.; Remond, A. Eye movement artifact nulling in EEGs by multichannel on-line EOG subtraction. *Electroencephalogram and Clinical Neurophysiology*, 1981, 52, 418-23.
EYM, INS
- 43 Barlow, H.B. Eye movements during fixation. *Journal of Physiology*, 1952, 116, 290-306.
EYM, FIX, INV
- 44 Barnes, G.R. Vestibulo-Ocular Function During Co-Ordinated Head and Eye Movements to Acquire Visual Targets. *Journal of Physiology*, 1979, 287, 127-147.
EYM, PHY, HDM, TAQ
- 45 Barnes, G.R.; Forbat, L.N. Cervical and Vestibular Afferent Control of Oculomotor Response in Man. Flying Personnel Research Committee, London, England. Report No. FPRC-1382, 23 October 1978.
PHY, EYM
- 46 Barnes, J.A.; Doss, N.W. Human engineering laboratory camouflage applications test (HEL CAT) observer performance. Human Engineering Laboratory, Aberdeen, Proving Ground, Report No. HEL-TM-32-76. November 1976.
EYM, TAG, CAM
- 47 Baron, L.J. Eye movement research and the interaction between television and child-related characteristics. Paper presented at the Annual Convention of the Association for Educational Communications and Technology, New Orleans, LA, March 1979. ERIC Document Reproduction Service (Computer Microfilm International Corporation), Arlington, VA.22210.
EYM, PSY, DEV, EOD, PSY
- 48 Barrow, H.B., Tenenbaum, J.K. Representation and uses of knowledge in vision. Stanford Research Institute Technical Note 108, 1975.
PSY
- 49 Barten, S., Birns, B., Rouch, J. Individual differences in the visual pursuit behaviour of neonates. *Child Development*, 1971, 42, 313-319.
IND, EYM, DEV
- 50 Bartz, A.E. Eye-movement latency, duration and response time as a function of angular displacement. *Journal of Experimental Psychology*, 1962, 64, 318-324.
EYM, PER, TCH
- 51 Beck, J. (Ed.) *Organisation and Representation in Perception*. Lawrence Erlbaum, 1982.
PSY, BOK

- 52 Becker, W. The control of eye movements in the saccadic system. Bibliotheca Ophthalmologica, 1972, 82, 233-243.
EYM, SAC, PHY
- 53 Becker, W. Research note: Do correction saccades depend exclusively on retinal feedback? A note on the possible role of nonretinal feedback. Vision Research, 1976, 16, 425-427.
EYM, SAC, PHY
- 54 Becker, W.; Fuchs, A.F. Further properties of the human saccadic system: eye movements and correction saccades with and without visual fixation points. Vision Research, 1969, 9, 1247.
EYM, SAC, FIX
- 55 Bellamy, L.J.; Courtney, A.J. Development of a search task for the measurement of peripheral visual acuity. Ergonomics, 1981, Vol. 24, p.497-509.
PER, VIS, MET
- 56 Bergen, J.R.; Wilson, H.R.; Cowan, J.D. Further evidence for four mechanisms mediating vision at threshold: sensitivities to complex gratings and aperiodic stimuli. Journal of the Optical Society of America, 1979, 69, p.1580.
PHY, THR
- 57 Bengi, H.; Thomas, J.G. Use of a piezo-accelerometer in studying eye-movements. Journal of the Optical Society of America. 1965, 55, 534-537.
EYM, INS
- 58 Biberman, L.M. (Ed.) Perception of Displayed Information. Plenum Press, 1973.
BOK
- 59 Biberman, L.M. Image Quality. In: L.M. Biberman (Ed.) Perception of Displayed Information. New York-London: Plenum Press, 1973.
IMQ
- 60 Biederman, I. Perceiving real-world scenes. Science, 1972, 177, 77-80.
REA
- 61 Biederman, I.; Rabinowitz, J.C.; Glass, A.L.; Stacy, E.W., Jr. On the information extracted from a glance at a Scene. Journal of Experimental Psychology, 1974, 103, 597-600.
TAC, PIC
- 62 Binford, T.O. Inferring surfaces from images. Artificial Intelligence, 1981, 17, 205-44.
PSY, CTL

- 63 Bjork, E.; Estes, W.K. Letter identification in relation to linguistic context and masking conditions. Memory and Cognition, 1973, 1, 217-223.
REC, RED, CXT, MAS
- 64 Blackwell, H.R.; Sinton, D.J. Accuracy of steady ocular fixation, and speed and accuracy of saccadic eye movements as a function of task visibility level. Journal of the Illumination Engineering Society, 1981, 11, 35-51.
EYM, SAC, FIX, PHY, IMQ, MOD
- 65 Blakemore, C.; Campbell, F.W. On the existence of neurones in the human visual system selectively sensitive to the orientation and size of retinal images. Journal of Physiology, 1969, Vol. 203, p.237.
PHY, TCH
- 66 Blommaert, F.J.J.; Roufs, J.A.J. The foveal point speed function as a determinant for detail vision. Vision Research, 1981, Vol. 21, No. 8, p.1223-33.
FOV
- 67 Bloomfield, J.R. Visual search with embedded targets: colour and texture differences. Human Factors, 1979, 21, 317-330.
VIS, CAM, TCH
- 68 Bloomfield, J.R.; Bechwith, W.E.; Emerick, J.; Marmurek, H.H.; Tei, E.E. Visual search with embedded targets. Army Research Institute for the Behavioural and Social Sciences, Alexandria, VA, Final Report, December 1978.
VIS, CAM
- 69 Bloomfield, J.R.; Graf, C.P.; Graffunder, K. Visual Factors in Target Disruption. Honeywell Incorporated, Minneapolis, Minnesota, Systems and Research Center, Report No: F0340-A005, December 1975.
CAM
- 70 Boersna, F.J.; Muir, W.; Wilton, K.; Barham, R. Eye movements during embedded figures tasks. Perceptual and Motor Skills, 1969, 28, 271-274.
EYM, CAM
- 71 Bogen, D.; Troost, B.T.; Daroff, R.B.; Dell'Osso, L.F.; Birkett, J.E. Velocity characteristics of normal human saccades. Investigative Ophthalmology, 1974, 13, 619.
EYM, SAC
- 72 Borello, L.; Ferrar, M.; Penego, P.; Lia Rossotti, M. A model of visual perception. Biological Cybernetics, 1981, Vol. 39, No. 2, p.79-85.
MOD, CTL

- 73 Bouma, H. Interaction effects in parafoveal letter recognition. *Nature*, 1970, 226, 177-178.
PER, REC, RED, INT
- 74 Bouma, H. Visual Search and Reading: Eye Movements and Functional Visual Field: A Tutorial Review. In: J. Requin (Ed.), *Attention and Performance*, VII, 1978.
VIS, RED, EYM, PER, REV
- 75 Bouma, H. Visual interference in the parafoveal recognition of initial and final letters of words. *Vision Research*, 1973, 13, 767-782.
PER, RED, REC, INT
- 76 Bouma, H.; Bouwhuis, D. Word recognition and letter recognition: Toward a quantitative theory for the recognition of words of three letters. *IPO Annual Progress Report*, 1975, 10, 53-59.
RED, REC, INT, PHY
- 77 Bow, L.J. The influence of the spatial distribution of a target on the dynamic response and fluctuations of the accommodation of the human eye. *Vision Research*, 1981, Vol. 21, No. 8, p.1287-96.
TCH, PHY
- 78 Bowen, H.M., Guinness, G.V. Apparent movement phenomena on CRT displays. Dunlop and Associates Inc., Connecticut, Report no: NASA-CR-67527, DRD-64-131, October 1964.
EOD
- 79 Bowling, A., Lovegrove, W. Two components to visible persistence: effects of orientation and contrast. *Vision Research*, 1981, Vol. 21, No. 8, p.1241-51.
TCH, IMQ
- 80 Boyce, P.R. The effect of change of target luminance and colour on fixation eye-movements. *Optica Acta*, 1967, 14, 119-126.
TCH, FIX
- 81 Boyce, P.R. *Proceedings of the Royal Society* 1967, Vol. 167, p.293.
EYM, SAC, INV
- 82 Bozkov, V.; Bohdanecky, Z.; Radil-Weiss, T. Eye movements and visual shape perception. *Activities Nervosis Supplement*, 1973, 15, 47-48.
EYM, FOR
- 83 Bozkov, V.; Bohdanecky, Z.; Radil-Weiss, T. Target point selection during scanning eye movements. *Biological Cybernetics*, 1977, 27, 215-220.
EYM, FRE, MOD, CTL

- 84 Bradshaw, J.L.; Cates, A.; Patterson, K. Hemispheric differences in processing visual patterns. Quarterly Journal of Experimental Psychology, 1976, 28, 667-681.
PHY, FOR
- 85 Brand, J. Classification without identification in visual search. Quarterly Journal of Experimental Psychology, 1971, 23, 178-86.
VIS, REC, PSY
- 86 Brandt, H.F. Ocular patterns and their psychological implications. American Journal of Psychology, 1940, 53, 260-268.
EYM, STR, PSY
- 87 Brandt, H.F. The Psychology of seeing. New York: Philosophical Library, 1945.
PSY, EOK
- 88 Dregloa, D.R. Helmet mounted eye tracker using a position sensing detector. Department of the Navy, Washington, D.C., Report no: PAT-APPL-6-262153, 11 May, 1981.
EYM, INS
- 89 Breslaw, P.I. The role of eye movements in hand movement control. Dissertation, University of Nottingham, England.
EYM, PHY, FOV, FIX
- 90 Breitmeyer, B.G.; Ganz, L. Implications of sustained and transient channels for theories of visual pattern masking, saccadic suppression and information processing. Psychological Review, 1976, 83, 1-36.
PSY, PHY, INT, SAC, EYM, FOR
- 91 Bridgeman, B., Stark, L. (Eds.) Theory of Binocular Vision. New York: Plenum Press, 1977, 1-210. (English Edition 1868).
PHY, BOK
- 92 Bridgeman, B.; Palca, J. The role of microsaccades in high acuity observational tasks. Vision Research, 1980, 20, 813-17.
INV, EYM, FOV
- 93 Brock, J.F.; Wells, R.G.; Abrams, M.L. Development and validation of an experimental radiograph reading training program. NPRDC-TR-74-33, 1974, Navy Personnel Research and Development Center, San Diego.
MET, TRA, VIS

- 94 Brown, B. Dynamic visual acuity, eye movements and peripheral acuity for moving targets. Vision Research, 1972, 12, 305-21.
EYM, PER, FOV, TCH
- 95 Brown, B. The effect of target contrast variation on movements. Vision research, 1972, 12, 1213-24.
TCH, EYM, FOV
- 96 Brown, M.B. The CYCLOPS Visual Performance Model. B.Ae.D. Report ST23215, 1979.
MOD, CTL
- 97 Brown, M.B. The DAE Target Acquisition Models. BAe Report No. BT 10667, June, 1980.
MCD, CTL, REV, TAQ
- 98 Bruell, J.H.; Albee, G.W. Notes toward a motor theory of visual egocentric localization. Psychological Review, 1955, 62, 301-308.
PHY, PSY
- 99 Buchsbaum, G. The retina as a two-dimensional detector array in the context of colour vision theories and signal detection theory. Proceedings of IEEE, 1981, Vol. 69, No. 7, p.772-86.
MOD, CTL
- 100 Buck, G.L. Rod-cone interaction on large and small backgrounds. Vision Research, 1981, Vol. 21, No. 7, p.1181-7.
PHY
- 101 Burgess, A.E.; Wagner, R.F.; Jennings, R.J.; Barlow, H.D. Efficiency of human visual signal discrimination. Science, 1981, Vol. 214, p.93-94.
PSP
- 102 Burian, H.M. Fusional movements. Archives of Ophthalmology, 1939, 21, 486-491.
EYM, INV
- 103 Burton, G.J. Evidence for non-linear response processes in the human visual system from measurements on thresholds of spatial beat frequencies. Vision Research, 1973, 13, 1211.
THR, PSP
- 104 Burton, G.J., Moorhead, J.R. Visual form perception and the spatial phase transfer function. Optical Society of America, Journal, Sept. 1981, Vol. 71, p.1056-1063.
FOR, IMQ

- 105 Buswell, G.T. .An experimental study of the 'Eye-Voice' span in reading. Thesis. Chicago. Supplementary Educational Monographs, 1920, 17.
RED, PSY, EYM
- 106 Buswell, G.T. How people look at pictures. Chicago: University of Chicago Press, 1935.
PIC, EYM, BOK
- 107 Caelli, T.M. Facilitative and inhibitory factors in visual texture discrimination. Biological Cybernetics, 1980, Vol. 39, No. 1, p.21-6.
INT
- 108 Caldeira, J.D. Parametric Assumptions of some "Nonparametric" Measures of Sensory Efficiency. Human Factors, 1980, 22, 119-120.
PSP, MET
- 109 Callan, J.R.; Curran, L.E.; Lane, J.L. Navy Personnel Research and Development Center, San Diego, CA. Report no. NPMDC-TR-77-32, May 1977.
VIS, EOD, MEM, PSY
- 110 Campbell, F.W.; Green, D.G. Optical and retinal factors affecting visual resolution. Journal of Physiology, 1965, 181, p. 576.
POV, PHY
- 111 Campbell, F.W.; Johnstone, J.R.; Ross, J. An explanation for the visibility of low frequency gratings. Vision Research, 1981, Vol. 21, No. 5, p.723-30.
IMQ
- 112 Campbell, F.W.; Robson, J.G. Application of Fourier Analysis to the Visibility of Gratings. Journal of Physiology, 1968, 197, 551.
IMQ, MET
- 113 Carlow, T.; Dell'Osso, L.F.; Troost, B.T.; Daroff, R.B.; Birkett, J.E. Saccadic eye movement latencies to multimodal stimuli: intersubject variability and temporal efficiency. Vision Research, 1975, 15, 1257-62.
EYM, SAC, IND
- 114 Carmody, D.P.; Kundel, H.L.; Nodine, C.F. Performance of a computer system for recording eye fixations using limbus reflection. Behavioural Research Methods and Instrumentation, 1980, 12, 63-6.
INS, EYM

- 115 Carmody, D.P.; Nodine, C.F.; Kundel, H.L. Global and segmented search for lung nodules of different edge gradients. Investigative Radiology, 1980, 15, 224-233.
VIS, AID
- 116 Carmody, D.P.; Nodine, C.F.; Kundel, H.L. Finding lung nodules with and without comparative visual scanning. Perception and Psychophysics, 1981, 29, 594-598.
VIS, AID
- 117 Carpenter, R.H.S. Oculomotor Procrastination. In: D.F. Fisher, R.A., Monty, J.W., Senders (Eds). Eye Movements Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981
EYM, PSY
- 118 Carr, T.H.; Bacharach, V.R. Perceptual tuning and conscious attention: systems of input regulation in visual information processing. Cognition, 1976, 4, 281-302.
ATT, PSY
- 119 Carr, T.; Lehmkuhle, S.W.; Kottas, E.; Astor-Stetson, E.C.; Arnold, D. Target position and practice in the identification of letters in varying context: a word superiority effect. Perception and Psychophysics, 1976, 19, 412-416.
TCH, RED, REC, CXT, TRA
- 120 Carter, R.C. Jr. Visual search with colour. Doctoral Thesis, Naval Biodynamics Laboratory, New Orleans, LA. Report No. NBDL-M005, October 1980.
VIS, TCH, IND
- 121 Cattell, J. On the relations between time and space in vision. Psychological Review, 1900, 7, 325-343.
PSY
- 122 Cavanagh, J.P.; Chase, W.G. The equivalence of target and non target processing in visual search. Perception and Psychophysics, 1971, 9, 493-495.
VIS, PSY
- 123 Cavanagh, J.P.; Parkman, J.M. Search processes for detecting repeated items in a visual display. Perception and Psychophysics, 1972, 11, 43-5.
VIS, STR
- 124 Cerutti, S.; Peterlongo, F.; Schmurd, R. A model for the generation of the muscle force during saccadic eye movements. 5th IFIP Conference on Optimization Techniques. Rome, Italy, 7-11 May 1973, p.151. Rome, Italy: University of Rome, 1973.
PHY, SAC, CTL

- 125 Chanamic, J.D. Memory effects in visual search: the graticule. Michigan University, Ann Arbor, Human Performance Center, Report No. TR-34, 010588-01-T, December 1971.
VIS, MEM, AID
- 126 Charlier, J.R.; Hache, J.C. New instrument for monitoring eye fixation and pupil size during the visual field examination. Medical and Biological Engineering and Computing, 1982, 20, 23-8.
INS
- 127 Chedru, F.; Leblanc, M.; L'Hermitte, F. Visual searching in normal and brain damaged subjects. Cortex, 1973, 9, 94-111.
VIS, IND, APH, PHY
- 128 Christ, R.E. Predicting Human Performance VI: The Accuracy of Identifying Simple Targets. New Mexico State University, University Park, Department of Psychology, Report No. NM-SU-ONR-TR-74-1, March 1974.
REV, REC, PSY
- 129 Clark, M.R.; Stark, L. Control of human eye movements: I. Modelling of extraocular muscle. Mathematical Bioscience, 1974, 20, 191-211.
EYM, CTL
- 130 Clark, M.R.; Stark, L. Control of human eye movements: II. A model for the extraocular plant mechanism. Mathematical Bioscience, 1974, 20, 213-38.
EYM, CTL
- 131 Clark, M.R.; Stark, L. Optimal control behaviour of human eye movements. Proceedings of the 59th Hawaii International Conference on System Science, Honolulu, Hawaii, 11-13 January, 1972, 88-91.
EYM, CTL
- 132 Clark, M.R.; Stark, L. Time optimal behaviour of human saccadic eye movement. IEEE Transactions on Automatic Control, 1975, 20, 345-348.
EYM, SAC, CTL
- 133 Clark, M.S.; Fiske, S.T. (Eds.) Affect and Cognition: The 17th Annual Carnegie Symposium on Cognition. Lawrence Erlbaum, 1982, New Jersey.
PSY, BOK
- 134 Clement, W.F.; Graham, D.; Best, J.J. A Pre-examination of Eye Movement Data. Systems Technology Incorporated, Hawthorne, California, Report no: STI-TM-163-A, February 1967.
EYM, CTL, REV

- 135 Cohen, A.S. Eye movements behaviour while driving a car: a review. Eidgenossische Technische Hochschule, Zurich, Switzerland, Institute for Behavioural Sciences. Technical Report, October 1978.
EYM, DEV, PSY
- 136 Cohen, A.S. Car drivers' pattern of eye fixations on the road and in the laboratory. Perceptual and Motor Skills, 1981, 52, 515-522.
EYM, FIX, DET
- 137 Cohen, A.S. Eye movements and the development of psychological processes. Unpublished paper commissioned in part by the National Institute of Education for their Conference on Eye Movement Research and Technology, 1974.
EYM, PSY, DEV
- 138 Cohen, E.S. The development of selective processing of information in the visual periphery. Unpublished doctoral dissertation, Harvard University, 1978.
PSY, DEV, PER
- 139 Cohen, E.S. Peripheral visual processing in human performance. Proceedings of the Human Factors Society, 24th Annual Meeting, 1980, p.621 (Abstract only).
PER, PSY
- 140 Cohen, E.S. The development of strategies of visual search. In: D.F. Fisher, E.A. Monty, J.W. Senders (Eds.) Eye Movements: Cognition and Visual Perception. Hillsdale, New Jersey; Lawrence Erlbaum Associates, 1981.
VIS, STR, DEV
- 141 Cohen, E.S.; Haith, M.M. Peripheral vision: The effects of developmental, perceptual and cognitive factors. Journal of Experimental Child Psychology, 1977, 24, 373-394.
PER, DEV, PSY
- 142 Cohen, E.S.; Haith, M.M. Processing wholes and parts in the visual periphery. Paper presented at the Meeting of the American Psychological Association, San Francisco, 1977.
PER, PSY
- 143 Cohen, E.S.; Ross, L.E. Saccade latency in children and adults: effects of warning interval and target eccentricity. Journal of Experimental Child Psychology, 1977, 23, 539-549.
SAC, EYM, DEV, PER

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permit fully legible reproduction

- 144 Cohn, T.E. Absolute threshold: analysis in terms of uncertainty. Journal of the Optical Society of America, 1981, Vol. 71, No. 6, p.783-5.
THR, PSY
- 145 Collier, R.M. An experimental study of form perception in indirect vision. Journal of Comparative Psychology, 1931, 11, 281-290.
FOR
- 146 Coltheart, M. Iconic Memory, a reply to Professor Holding. Memory and Cognition, 1975, 3, 42-48.
MEM, PSY, INT
- 147 Coltheart, V. Recognition errors after incidental learning as a function of different levels of processing. Journal of Experimental Psychology: Human Learning and Memory, 1977, 3, 437-444.
PSY, REC
- 148 Compton Collins, C. Human eye movement control. Proceedings of the 1975 International Conference on Cybernetics and Society. San Francisco, California, 23-25 September, 1975, 340-1. New York: IEEE, 1975.
EYM, CTL
- 149 Cook, G.; Stark, L. The human eye-movement mechanism: Experiments, modelling and model testing. Frank J. Seiler Research Laboratory, United States Air Force Academy, Colorado (319920), Report no. SRL-67-0005, June 1967.
EYM, MOD, PHY
- 150 Cook, M. Eye movements during recognition of faces. In: M.M. Gruneberg, P.E. Morris, and R.N. Sykes (Eds.). Practical Aspects of Memory. pp. 303-310. London: Academic Press, 1978.
EYM, REC
- 151 Cooke, K.J. The combined ORACLE and CYCLOPS visual performance model. E.Ae.D. Report ET10032, 1980.
MOD, CTL
- 152 Cooke, K.J.; Bell, J.E. Image quality interactions with peripheral visual performance. E.Ae.D. Report ET10420, 1980.
IMQ, PER
- 153 Cooper, R. The control of eye fixation by the meaning of spoken language. Cognitive Psychology, 1974, 6, 84-107.
EYM, PSY

- 154 Cooper, R. A neurophysiological study of the changes taking place during an extended watch period. Technical Report, Burden Neurological Institute, Bristol, July 1979.
VIC, PHY, REC, EOD
- 155 Coren, S. Lateral inhibition and geometric illusions. Quarterly Journal of Experimental Psychology, 1970, 22, 274-278.
INT
- 156 Coren, S. Lateral inhibition and the Wundt-Mering illusion. Psychonomic Science, 1970, 18, 341.
INT
- 157 Coren, S.; Bradley, D.R.; Hoenig, P.; Girgus, J.S. The effect of smooth tracking and saccadic eye movements on the perception of size: the shrinking circle illusion. Vision Research, 1975, 13, 49-55.
EYM, SAC
- 158 Coren, S.; Hoenig, P. Effect of non target stimuli upon length of voluntary saccades. Perceptual and motor skills, 1972, 34, 499-508.
EYM, SAC
- 159 Cornsweet, T. Determination of the Stimuli for Involuntary Drifts and Saccadic Eye Movements. Brown University, Providence, RI. 21 April, 1956 (Contract n7our35811)
EYM, SAC, INV, TCH
- 160 Cornsweet, T. Journal of the Optical Society of America, 1956, Vol. 46, p.987.
EYM, INV, SAC, MOD
- 161 Cornsweet, T. Visual perception. Academic Press, New York, 1970.
REV, BOK
- 162 Corrick, G.E. Detection of different target types in realistic terrain. Naval Weapons Center, China Lake, CA, Report No. HAC-FR-79-27-676, March 1979.
TAQ, PIC, TCH, REA
- 163 Corrick, G.E.; Olzak, L.A.; Agin, A.K. Feasibility of using Naval Weapons Center, China Lake, CA, Report no. HAC-REF-E3900, March 1980.
CTL, MOD, TAQ, TCH
- 164 Costanza, E.B.; Stacey, S.R.; Snyder, H.L. Air-to-air target acquisition: Factors and means of improvement. School of Aerospace Medicine, Brooks AFB, TX, Final Report no. VPI-HPL-79-10, March 1980.
AIR, TAQ, REV, TRA

- 165 Courtney, A.J. The peripheral visual field and search performance. Proceedings of the 16th Annual Ergonomics Conference, Australia and New Zealand, p. 131-137, 1979.
PER, VIS
- 166 Craig, A. Monitoring for one kind of signal in the presence of another - the effects of signal noise on detectability. Human Factors, 1981, Vol. 23, p.191-197.
PSY, TCH
- 167 Crovitz, H.F.; Davies, W.L. Tendencies to eye movement and perceptual accuracy. Journal of Experimental Psychology, 1962, 63, 495-498.
EYM, FOV
- 168 Cunitz, R.J.; Steinman, R.W. Vision Research, 1961, Vol. 9, p.683.
SAC, EYM, RED, FIX
- 169 Curran, L.E. Navy Tactical Data Information Display Complexity Effects on Visual Search Reaction Time and Response Accuracy. Naval Postgraduate School, Monterey, CA, Master's Thesis, September, 1977.
VIS, MEM
- 170 Czaja, S.J.; Drury, C.G. Training Programs for Inspection. Human Factors, 1981, 23, 473-484.
TRA, VIS
- 171 Davidson, B.J. A rotating buffer system for on-line collection of eye monitor data. Behavior Research Methods and Instrumentation, 1981, 13, 112-114.
INS
- 172 Davies, E.B. Visual search theory with particular reference to air to ground vision. R.A.E. Tech. Rep. 68055, 1968.
VIS, AIR
- 173 Davson, H. (Ed.) The Eye. Academic Press, New York, ed. 2, 1970, Vol. 3.
PHY, BOK
- 174 Day, M.C. Developmental trends in visual scanning. In: H.W. Reese, (Ed.), Advances in child development and behaviour. (Vol. 10). New York: Academic Press, 1975.
DEV, BOK, EYM
- 175 Dell'Osso, L.F.; Darott, R.B. Eye movement characteristics and recording techniques. In: J.S. Glaser (Ed.), Neuro-Ophthalmology. Hagerstown, MD: Harper and Row, 1978. pp.185-200.
EYM, INS

- 176 Derrington, A.M.; Dence Henning, G. Pattern discrimination with flickering stimuli. Vision Research, 1981, Vol. 21, No. 4, p.597-602.
REC, TCH
- 177 Deubel, H.; Wolf, W.; Hauske, G. Corrective saccades - effect of shifting the saccade goal. Vision Research, 1982, 22, p.353-64.
EYM, SAC, INV
- 178 Deutsch, J.A.; Deutsch, D. Attention: some theoretical considerations. Psychological Review, 1963, 70, 80-90.
ATT
- 179 Dichgans, J.; Bizzi, E. (Eds.) Cerebral control of eye movements and motion perception. Symposium Freiburg, Basel: Karger, 1972.
EYM, PHY, BOK,
- 180 Dick, A.O. Instrument Scanning and Controlling: Using eye Movement Data to Understand Pilot Behavior and Strategies. National Aeronautics and Space Administration, Washington, DC, Final report no. NASA-CR-3306, BRAG-TR-79-2, September, 1980.
EYM, PSY, MOD
- 181 Dick, G.L. Computer analysis of rapid eye movements. Computer Programs for Biomedicine, 1978, 29-34.
EYM, INS
- 182 Didday, R.L.; Arbib, M.A. Eye movements and visual perception: A "two visual system" model. COINS Technical Report 736-9. University of Massachusetts, 1972.
EYM, MOD
- 183 Ditchburn, R.W. Eye movements and visual perception. Oxford: Clarendon Press, 1973.
EYM, POK
- 184 Ditchburn, R.W. The function of small saccades. Vision Research, 1980, 20, 271-272.
EYM, SAC, PSY
- 185 Ditchburn, R.W.; Foley-Fisher, J.A. Assembled data in eye movements. Optica Acta, 1967, 14, 113-18.
EYM, INV
- 186 Ditchburn, R.W.; Gillsborg, B.L. Involuntary eye movements during fixation. Journal of Physiology 1953, 119, 1-17.
INV, FIX, EYM

- 187 Doyle, R.J.; Heiman, F.P.; Kerman, M. Modulation transfer function of electrical output cathode ray storage tubes. SID Journal 1(4), p.20-22.
IMC
- 188 Drury, C.G.; Fox, J.G. (Eds.) Human reliability in quality control. London: Taylor and Francis, 1975.
VIS, BOK
- 189 Duda, R.; Hart, P. Pattern classification and scene analysis. New York: Wiley, 1973.
EYM, FOR, BOK
- 190 Dudley, R.C.; Brown, V.A. (Eds.) Visual Modelling for Operational Research. Visual Modelling for Operational Research Symposium, RMCS, Shrivenham, UK, 18-19 January, 1978.
MOD, CTL
- 191 Dunne, L.J.; Drandas, E.J. The molecular basis of vision: a reply to a comment. Chem. Phys. Lett., 1981, Vol. 78, No. 1, p.202-5.
PHY
- 192 Dunn-Rankin, P. Basic methods in the measurement of qualitative data. Lawrence Erlbaum, 1982, New Jersey.
MET, BOK
- 193 Ebberts, R.W. An investigation of vision during involuntary saccadic eye movements. Master's Thesis, June 1965, Indiana University, Bloomington.
INV, EYM
- 194 Ebenholtz, S.M. Additivity of after effects of maintained head and eye rotations: An alternative recalibration. Perception and Psychophysics, 1976, 19, 113-116.
HDM, EYM, INS
- 195 Eckstrand, G.A. Current status of the technology of training. Wright-Patterson AFB Aerospace Medical Laboratory, Report AMRL-TRR-64-86. 1964.
TRA
- 196 Edwards, N. C. Jr.; Mazour, J.J.; Bemont, R.A.; Osmer, S.R. Evaluation of National SAR Manual. Probability of Detection Curves. Coast Guard, Washington DC, Office of Research and Development, Interim Report, September 1980.
TAG, MOD, VIS

- 197 Edwards, N.C.Jr.; Mazour, J.J.; Hoyer, G.L.; Osmer, S.R. Analysis of Side-Looking Airborne Radar performance in the detection of search and rescue targets. Coast Guard Research and Development Center, Groton, CT, Interim Report, March 1980.
AIR, VIS, EOD
- 198 Edwards, N.C. Jr.; Mazour, J.J.; Hoyer, G.L.; Osmer, S.R. Factors Affecting Coast Guard SAR Unit Visual Detection Performance. Coast Guard Research and Development Center, Groton, CT, Interim Report, August 1981.
VIS, TAG, MOD, EOD
- 199 Egeth, H.; Atkinson, J.; Gilmore, G.; Marcus, N. Conditions for improving visual information processing. Johns Hopkins University, Baltimore, MD, Department of Psychology, Report no. TR-73, TR-74, July 1973.
VIS, MOD, PSY
- 200 Egeth, H.; Jonides, J.; Wall, S. Parallel processing of multielement displays. Cognitive Psychology, 1972, 3, 674-698.
PSY
- 201 Ehrlichman, H.; Weinberger, A. Lateral eye movements and hemispheric asymmetry. A critical review. Psychological Bulletin, 1978, 85, 1080-1101.
REV, EYM, PHY
- 202 Elias, R.; Cail, F.; Tisserand, M.; Christmann, H. Investigations in operators working with CRT display terminals: relationships between task content and psychophysical alterations.
EOD, PSP
- 203 Ellis, S.R.; Stark, L. Eye movements while viewing Necker cubes. Perception, 1978, 7, 575-581.
EYM, FRE
- 204 Embrey, D.E. Signal detection theory in the analysis and optimisation of industrial inspection tasks. Unpublished Ph.D. thesis, University of Aston in Birmingham, 1976.
VIS, CTL, MOD
- 205 Engel, F.L. Visual conspicuity as an external determinant of eye movements and selective attention. Eindhoven, Netherlands: Technische Hogeschool Eindhoven, 1976.
EYM, TCH, ATT
- 206 Engel, F.L. Visual conspicuity, visual search and fixation tendencies of the eye. Vision Research, 1977, 17, 95-108.
VIS, FIX, EYM, TCH

- 207 Engelken, E. J.; Wolfe, J.W. Analog Signal Processing of Eye Movements for On-Line Digital Computer Analysis. Physiology and Behavior, 1977, 18, 157-158.
INS
- 208 Epstein, W. Recalibration by pairing: A process of perceptual learning. Perception, 1975, 4, 5972.
TRA
- 209 Erickson, R.A. Visual Search for Targets: Laboratory Experiments. Naval Ordnance Test Station, China Lake, CA, Report no. TP 3329, October 1964.
VIS, IND, PER
- 210 Erickson, R.A. Visual Search Experiments: Acuity, Response Time, Noise Persistence. Naval Ordnance Test Station, China Lake, CA, Report no. NOTS-TP-3787, July, 1965.
VIS, FOV, EOD, PER
- 211 Erickson, R.A.; Burge, C.J. Modelling Air-to-Air Visual Search. Naval Weapons center, China Lake, CA, Report no. NWC-TP-5709, October 1974.
VIS, AIR, MOD
- 212 Eriksen, B.A.; Eriksen, C.W. Effects of noise letters upon the identification of a target letter in a nonsearch task. Perception and Psychophysics, 1974, 16, 1431-49.
RED, INT, TAG
- 213 Eriksen, C.W. Partitioning and saturation of the perceptual field and efficiency of visual search. Johns Hopkins University, Baltimore, MD, Institute for Cooperative Research, April, 1954 (limitation now removed).
VIS, AID, EOD
- 214 Erlandson, R.F.; Fleming, D.G. Uncertainty sets associated with saccadic eye movements - basis of satisfaction control. Vision Research, 1974, 14, 481-6.
EYM, SAC, PSY
- 215 Estes, W.K. Interactions of signal and background variables in visual processing. Perception and Psychophysics, 1972, 12, 278-286.
INT
- 216 Estes, W.K. The locus of inferential and perceptual processes in letter identification. Journal of Experimental Psychology: General, 1975, 104, 122-145.
RED, REG, PSY

- 217 Estes, W.K.; Allmeyer, D.H.; Reder, S.M. Serial position functions for letter identification at brief and extended exposure durations. Perception and Psychophysics. 1976, 19, 1-15.
RED, TAC
- 218 Estevez, N.; van der Theel, L.H. Signal processing in vision. In: Theories and Applications of Signal Processing. Proceedings of EUSI PCO-80, First European Signal Processing Conference, 16-18 Sept. 1980, p.335-41.
PSY
- 219 Evarts, E.V. Precentral and postcentral cortical activity in association with visually triggered movement. Journal of Neurophysiology. 1974, 37, 373-381.
PHY
- 220 Feather, N.T. (Ed.) Expectations and Action: Expectancy-Value Models in Psychology. Lawrence Erlbaum, New Jersey, 1982.
PSY, MOD, POK
- 221 Feinstein, R.; Williams, W.J. An algorithmic model for aspects of visual information processing and eye movements. Proceedings of the 23rd Annual Conference on engineering in medicine and biology, Washington, 16-19 November, 1970, p. 136. New York: IEEE, 1970.
EYM, MOD, PSY, CTL
- 222 Feldman, A.G. The composition of central programs subserving horizontal eye movements in man. Biological Cybernetics, 1981, 42, 107-16.
EYM, CTL
- 223 Fender, D.H. The function of eye movements in the visual process. Unpublished doctoral dissertation. University of Reading, U.K., 1956.
EYM
- 224 Fender, D.H., Nye, P.W. An investigation of the mechanism of eye-movement control. Kybernetik, 1961, 1, 81-88.
EYM, CTL
- 225 Festinger, L., Burnham, C.A., Ono, H., Bamber, D. Efference and the conscious experience of perception. Journal of Experimental Psychology Monograph, 1967, (Whole No. 637).
PSY
- 226 Fillin, V.A.; Ananin, V.F. Time contradictions of the hypothesis of the correction of the saccadic movements of the eyes. Biophysics, 1972, 17, 757-61.
EYM, SAC, INV

- 227 Filin, A.V., Mizinova, A.A. News Medical Instrumentation, 1969, Vol. 52, p.52.
EYM, SAC, TRA
- 228 Findlay, J.M. The magnitude of translational head movements. Optica Acta, 1969, 16, 65-8.
HDM
- 229 Findlay, J.M. Involuntary eye movements and information processing. Paper presented to Experimental Psychology Society, Cambridge, April 1970.
INV, EYM, PSY
- 230 Findlay, J.M. Frequency analysis of human involuntary eye-movements. Kybernetik, 1971, 8, 207-214.
INV, EYM
- 231 Findlay, J.M. Fixation eye movements and the processing of visual information. Optica Acta, 1972, 19, 403-407.
EYM, FIX, HDM, PSY, MOD
- 232 Findlay, J.M. A simple apparatus for recording microsaccades during visual attention. Quarterly Journal of Experimental Psychology, 1974, 26, 167-170.
INV, INV
- 233 Findlay, J.M. Direction perception and lower fixation eye movements. Vision Research, 1974, 14, 703-11.
EYM, FIX
- 234 Findlay, J.M. The visual stimulus for saccadic eye movements in human observers. Perception, 1980, 9, 7-21.
EYM, SAC, TCF
- 235 Findlay, J.M. Spatial and temporal factors in the predictive generation of saccadic eye movements. Vision Research, 1981, Vol. 21, No. 3, p.347-354.
EYM, SAC
- 236 Fiorentini, A. and Procles, A.M. Atti Fondazione Giorgio Ronchi, 1966, 21, 199.
EYM, SAC
- 237 Fischer, D. Vision with moving eyes. Naturwissenschaften, 1973, 65, 96-103.
EYM
- 238 Fisher, D.F., Monty, R.A., Perlmuter, L.C. Visual recognition memory for binary pictures: Another look. Journal of Experimental Psychology: Human Learning and Memory, 1978, 4, 158-164.
REC, PER

- 239 Fisher, D.F., Monty, R.A., Senders, J.W. (Eds.) Eye Movements: Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
EYM, PSY, BOK
- 240 Foley, J.M., Legge, G.E. Contrast detection and near-threshold discrimination in human vision. Vision Research, 1981, Vol. 21, No. 7, p.1041-53.
THR
- 241 Forrest, E.B. Astigmatism as a function of visual scan, head scan and head posture. American Journal of Optometry and Physiological Optics. Vol. 57, No. 11, p.844-50, 1980.
HDM, ABN, EYM
- 242 Freska, C., Ellis, S., Stark, L. Simplified measurement of eye fixation. Computers in Biology and Medicine, 1980.
INS, FIX
- 243 Frith, V. Lines that affect speed of visual scanning. Perception, 1975, 4, 407-409.
AID, EYM
- 244 Frome, F.S., Buck, S.L., Boynton, R.M. Visibility of borders. Separate and combined effects of color differences, luminance contrast, and luminance level. Journal of the Optical Society of America, 1981, Vol. 71, No. 2, p.145-50.
IMQ
- 245 Frost, D.; Poppel, E. Different programming modes of human saccadic eye movements as a function of stimulus eccentricity: indications of a functional subdivision of the visual stimulus. Biological Cybernetics, 1976, 23, 39-48.
EYM, SAC, PER, CTL
- 246 Fu, K.S. Syntactic models in pattern recognition and applications. Pattern Recognition in Practice. Proceedings of an International Workshop. Amsterdam Netherlands, 21-23 May 1980, p.303-14.
MOD, FOR
- 247 Fuchs, A.F., Robinson, D.A. Journal of Applied Physiology, 1966, Vol. 21, p.1068.
SAC, TRA, FIX
- 248 Gadir, O.M.A.; Quarmby, D.J. Microprocessor-based real time system for eye motion analysis. Electronics Letters, 1981, 17, 196-7.
INS

- 249 Gale, A.G. The role of eye movements in figure perception. Ph.D Thesis, Department of Psychology, University of Durham. 1980.
EYM, FOR, PSY
- 250 Gale, A.G. A note on the remote oculometer technique for recording eye movements. Vision Research, 1982, 22, 201-2.
INS
- 251 Gale, A.G.; Findlay, J.M. Eye movement patterns in viewing ambiguous figures. In: Groner, Menz, Fisher, Monty (Eds.) Eye Movements: An International Perspective. (In Press).
EYM, FOR
- 252 Gale, A.G.; Johnson, F.; Wothington, B.S. Research in Medical Image Perception- A Microprocessor Application. In: J.P. Paul, M.M. Jordan, M.W. Ferguson-Pell, (Eds) London: Macmillans, 1982.
VIS, INS
- 253 Gale, A.G. Worthington, B.S. The Utility of Scanning Strategies in Radiology. In: Groner, Menz, Fisher, Monty (Eds) Eye Movements: An International Perspective. (In Press).
EYM, VIS, STR
- 254 Garvey, T.D. Artificial intelligence strategies for purposive vision. SRI International, Note 117, 1976.
STR, CTL, MOD
- 255 Gatchell, S.M. Power boat operators' visual behaviour patterns. Proceedings of the 21st Annual Meeting of the Human Factors Society, Los Angeles, 179-183, 1977.
EYM
- 256 Geiselman, R.E.; Landel, B.M.; Christen, F.G. Perceptual discriminability as a basis for selecting graphic symbols. Human Factors, 1982, 24, 329-337.
TCH
- 257 Genter, C.E., Randel, G.L., Geri, G.A. Coincidence eye position device with applications in clinical psychophysics, eye-position training and visual evoked response recording. Biological Engineering and Computing, 1981, Vol. 19, No. 4, p.509-13.
EYM, PSP, TRA, INS
- 258 Geratewohl, S.J. Eye movement during radar operations. Aviation Medicine, 23, 597-607, 1952.
EYM, EOD

- 259 Geratewohl, S.J.; Brown, E.L.; Burke, J.E.; Kimball, K.A.; Lowe, W.F.; Strackhouse, S.P. Inflight measurement of pilot workload: A panel discussion. Aviation Space and Environmental Medicine, 1978, June, 810-822.
PSY
- 260 Gherody, J.C. The perceived stability of fixation. American Journal of Optometry and Physiological Optics. 1982, Vol. 58, No. 2, p.449-54.
EYM, FIX
- 261 Gibson, E.G. Improvement in perceptual judgements as a function of controlled practice or training. Psychological Bulletin, 1953, 50, 401-431.
TRA
- 262 Gibson, J.J. The possibilities of research on training in recognition and other visual performances. Report to the Armed Forces by the NRC Vision Committee, University of Michigan, 1947.
TRA, REC
- 263 Gibson, J.J. The perception of the visual world. Boston: Houghton-Mifflin, 1950.
BOK
- 264 Gibson, J.J. The senses considered as perceptual systems. Boston: Houghton-Mifflin, 1966.
BOK
- 265 Gibson, J.J. The ecological approach to visual perception. Boston: Houghton-Mifflin, 1979.
CTL, BOK
- 266 Ginzburg, V.M. Defocusing as a method of optical image transformation at the technical and visual system inputs. Optical Communication, 1981, Vol. 36, No. 4, p.258-60.
EOD
- 267 Gippenreyter, Y.B. Eye movements in human activity and its study. Scientific Translation Service, Santa Barbara, CA, Report no. NASA-F-16234, April 1975.
EYM, REV
- 268 Glaser, J.S. (Ed.) Neuro-Ophthalmology. Hagerstown, MD: Harper & Row, 1978.
PHY, BOK
- 269 Gleitman, H. and Jonides, J. The cost of categorization in visual search: incomplete processing of targets and field items. Perception and Psychophysics, 1976, 20, 281-288.
VIS, PSY

- 270 Goillau, P.J. Effect of display subtense on eye movement search. Memorandum 3449, March 1982, Royal Signals and Radar Establishment, Malvern, Worcs.
VIS, EYM, EOD
- 271 Goldberg, M.E.; Robinson, D.L. Visual Mechanisms Underlying Gaze: Function of the Cerebral Cortex. In: Control of Gaze by Brain Stem Neurons, Developments in Neuroscience, VI, 469-476, 1977.
PHY, EYM
- 272 Goodwin, A.W.; Fender, D.H. The interaction between horizontal and vertical eye-rotations in tracking tasks. Vision Research, 1973, 13, 1701-12.
EYM
- 273 Gopher, D. Eye movement patterns in selective listening tasks of focussed attention. Perception and Psychophysics, 1973, 14, 259-264.
EYM, ATT
- 274 Gordon, I.E. Interactions between items in visual search. Journal of Experimental Psychology, 1968, 76, 348-355.
VIS, INT
- 275 Gottesman, J.; Rubin, G.S.; Legge, G.E. A power law for perceived contrast in human vision. Vision Research, 1981, Vol. 21, 791-9.
PSP
- 276 Goucharenko, E.N., Kachurin, V.S., Nefedov, B.L. Objective with circular field of view. Soviet Journal of Optical Technology, 1980, Vol. 47, No. 8, p.57-8.
EOD
- 277 Gould, J.D. Pattern recognition and eye movement parameters. Perception and Psychophysics, 1967, 2, 399-407.
EYM, REC
- 278 Gould, J.D. Eye movements during visual search and memory search. Journal of Experimental Psychology, 1973, 98, 184-195.
VIS, MEM, EYM
- 279 Gould, J.D., Schoonard, J.W. Eye movement during visual inspection of integrated circuit chips. IBM Report, 1969.
EYM, VIS
- 280 Gould, R.G., Belanger, B., Goldberg, H.I., Moss, A. Objective performance measurements versus perceived image quality in intensified fluoroscopic or photospot images. Radiology, 1980, Vol. 137, No. 3, p.783-8.
IMQ

- 281 Graboi, D. Searching for targets: the effect of specific practice. Perception and Psychophysics, 1971, 10, 300-304.
VIS, TRA, PSY
- 282 Graham, C.H. and Cook, C. Journal of Psychology, 1937, 49, 654.
TAC
- 283 Graham, N., Robson, J.G., Nachmias, J. Grating summation in fovea and periphery. Vision Research, 1978, Vol. 18, p.815.
PER, FOV
- 284 le Grand, Y. Form and space vision. Bloomington, Indiana University Press, 1966.
BOK
- 285 le Grand, Y., El Hage, S.G. Physiological Optics. Springer-Verlag, Berlin, Germany, 1980.
PHY, BOK
- 286 Granda, T.M. An evaluation of visual search behavior on a cathode ray tube utilizing the window technique. Army Research Institution for the Behavioral and Social Sciences, Alexandria, VA, Report no. ARI-TECHNICAL PAPER-283, February 1978.
VIS, EOD, AID
- 287 Granrath, D.J. The role of human visual models in image processing. Proceedings of IEEE 1981, Vol. 69, No. 5, p.552-61.
MOD, PSY, CTL, MOD
- 288 Green, M. Psychophysical relationships among mechanisms sensitive to pattern, motion and flicker. Vision Research, 1981, Vol. 21, No. 7, p.371-83.
PSP
- 289 Greenstein, V.C., Hood, P.C. Variations in brightness at two retinal locations. Vision Research, 1981, Vol. 21, No. 6, p.885-91.
PHY
- 290 Greenwood, R.E. Some effects of involuntary eye movements. Journal of the Optical Society of America, 1972, 62, 101-3.
INV, EYM
- 291 Gresty, M.A. Coordination of head and eye movements to fixate continuous and intermittent targets. Vision Research, 1974, 14, 395-403.
HDM, EYM, FIX, TCH

- 292 Grindley, G.C. Psychological factors in peripheral vision. Medical Research Council, Special Reports Series, No. 163. London: His Majesty's Stationery Office, 1931.
PER, PSY
- 293 Grindley, G.C. & Townsend, V. Voluntary attention in peripheral vision and its effects on acuity and differential thresholds. Quarterly Journal of Experimental Psychology, 1968, 20, 11-19.
PER, ATT, THR, FOV
- 294 Grindley, G.C. & Townsend, V. Visual search without eye movement. Quarterly Journal of Experimental Psychology, 1970, 22, 62-67.
VIS, ATT
- 295 Grobstein, P., Chow, K.L. Receptive field organization in the mammalian visual cortex: the role of individual experience in development. In: C. Gottlieb (Ed.) Neural and behavioural specificity. New York: Academic Press, 1976.
PSY, DEV
- 296 de Groot, P.J., Terpstra, R.E. Millimeter-wave model of a foveal receptor. Journal of the Optical Society of America, 1980, Vol. 70, No. 12, p.1436-52.
PHY
- 297 Grossberg, S. (Ed.) Mathematical psychology and psychophysiology. New Jersey: Lawrence Erlbaum, 1982.
PSY, PHY, CTL, BOK
- 298 Grossman, J.D.; Whitehurst, H.D. Effect of visual acuity on target acquisition. Naval Weapons Center, China Lake, CA, Report no. NWC-TP-5884, June 1976.
FOV, TAQ
- 299 Gutmann, J.C.; Snyder, H.L.; Farley, W.W.; Evans, J.E. III. An Experimental Determination of the effect of image quality on eye movements and search for static and dynamic targets. Aerospace Medical Research Laboratory, Wright-Patterson AFB, Technical Report, August 1979.
IMQ, EYM, VIS, TCH
- 300 Haber, R.N. (Ed.) Contemporary theory and research in visual perception. New York: Holt, Rinehart and Winston, 1968.
BOK

- 301 Haddad, G.M.; Steinman, R.M. The smallest voluntary saccade: Implications of fixation. Vision Research, 1973, 13, 1075-86.
EYM, SAC, FIX
- 302 Haines, J.D. Non-contracting ultrasound transducer suitable for eye movement recording. Ultrasound in Medicine and Biology, 1977, 3, 39-45.
INS
- 303 Haith, M.M. Rules that babies look by: the organisation of newborn visual activity. New Jersey: Lawrence Erlbaum Associates, 1980.
DEV, EYM, BOK
- 304 Hamerly, J.R., Dvorak, C.A. Detection and discrimination of blur in edges and lines. Journal of the Optical Society of America. 1981, Vol. 71, No. 4, p.448-52.
TCH
- 305 Hamerly, J.R., Springer, R.H. Raggedness of edges. Journal of the Optical Society of America, 1981, Vol. 71, No. 3, p.285-8.
TCH
- 306 Hammil, H.B.; Fryer, W.D. Visual Detection Model for Structured Targets. (Penval Program). Calspan Advanced Technology Center, Buffalo, NY, Report no. CALSPAN-6364-X-13, November 1980.
TAQ, CTL, MOD
- 307 Hanson, A.R., Riseman, E.M. Processing cones: A parallel computational structure for scene analysis. COINS Technical Report 74-77, University of Massachusetts, 1974.
PHY
- 308 Harris, R.L., Christhilf, P.M. What do pilots see in displays? In: Proceedings of the Human Factors Society 24th Annual Meeting in Los Angeles, CA, October 13-17, 1980, p.22-26. Santa Monica, CA: Human Factors Society Inc., 1980.
EYM, PSY
- 309 Hatada, T.; Sakata, H.; Kusaka, H. Psychophysical analysis of the 'sensation of reality' induced by a visual wide-field display. SMPTE Journal, 1980, 89, 560-9.
PSP
- 310 Hauske, G. Superposition of edges and gratings: interaction between central and peripheral regions. Vision Research, 1981, Vol. 21, No. 3, p.373-84.
PER, INT

- 311 Hebb, D.O. Essay on Mind. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1980.
PSY, BOK
- 312 Heckenmueller, E.G. Psychological Bulletin, 1965, Vol. 63, p157.
REV
- 313 Henderson, L. Effects of letter-names on visual search. Cognitive Psychology, 1973, 5, 90-96.
RED, VIS, PSY
- 314 Henderson, L. Pandemonium and visual search. Perception, 1978, 7, 97-104.
VIS, RED, REV, MOD
- 315 Henson, D.E. Corrective saccades: Effects of altering visual feedback. Vision Research, 1978, 18, 63-7.
EYM, SAC
- 316 Henson, D.E. Investigation into corrective saccadic eye movements for refixation amplitudes of ten degrees and below. Vision Research, 1979, 19, 57-61.
EYM, SAC, FIX, INV
- 317 Heywood, S. Asymmetries related to cerebral dominance in returning the eyes to specified target positions in the dark. Vision Research, 1973, 13, 81-94.
PHY, EYM
- 318 Heywood, S., Churcher, J. Saccades to step-ramp stimuli. Vision Research, 1981, Vol. 21, No. 4, p.479-90.
EYM, SAC
- 319 Hirschfeld, R.; Bieger, G. Instrumentation and software for the collection analysis, and interpretation of eye movement data during reading. New York State College of Agriculture and Life Sciences, Ithaca, Department of Education, Report no. RR-4-SER-B, TM-3, June 1981.
INS, RED
- 320 Hochberg, J. Components of literacy: speculations and exploratory research. In H. Levin & J.P. Williams (Eds.), Basic studies on reading. New York: Basic Books, 1970.
RED, PSY
- 321 Hochberg, J. Perception. Englewood, NJ: Prentice-Hall, 1978 (Second ed.)
BOK

- 322 Hoekstra, J.J. et al. The influence of number of cycles on the visual contrast threshold for spatial sine wave patterns. Vision Research, 1974, 14, 365.
THR
- 323 Hoffman, J.E.; Nelson, B. Spatial Selectivity in Visual Search. Delaware University, Newark, Department of Psychology, Report no. RR-8002, October, 1980.
VIS, ATT, RED
- 324 Hoffman, J.E.; Nelson, B. Spatial Selectivity in Visual Search. Perception and Psychophysics, 1981, 30, 283-290.
VIS
- 325 Hoffman, J.E.; Nelson, B.; Laubach, M. A Dual Task Analysis of Controlled and Automatic Detection. Office of Naval Research, Arlington, VA, Technical Report, 21 May, 1980.
PSY, TAC
- 326 Hoffman, J.E.; Simons, R.P.; Houck, L.H. Event-related Potentials Elicited by Controlled and Automatic Target Detection. Dept. of Psychology, Delaware University, Newark, Technical report no. RR-8102, September, 1981.
TAC, PSY
- 327 Jolner, E.J.; Meskovec, J. L'enregistrement des mouvements des yeux d'un automobiliste. Institut de Psychologie du Trafic de l'Organisation Autrichienne de Sécurité Routière, VPI Report 1, 1974.
FY
- 328 Kellogg, J.C.; Coddick, G.L. Eccentric Viewing Training. Journal of the American Optometric Association, 1976, 49, 10.
PER, TRA
- 329 Kolding, E.H. Sensory storage reconsidered + a rejoinder. Memory and Cognition, 1975, 3, 31-41; 49-50.
MEM, PSY
- 330 Kollerbach, J.H. Hierarchical shape description of objects by selection and modification on prototypes. M.S. thesis AI-TH-340, MIT, Cambridge, MA, 1975.
PSY
- 331 Korman, L.K.R. The effects of terrain clutter on observer behavior during search of complex scenery. E.Ae. Report no. DT-13535, August, 1982.
VIS
- 332 Hou, L.R. The programming strategy of the saccadic eye movement control system. Doctoral thesis, 1978, California Institute of Technology, Pasadena.
SAC, CTL, FY

- 333 Hou, R.L.; Fender, D.H. Processing of direction and magnitude by the saccadic eye-movement system. Vision Research, 1979, 19, 1421-6.
SAC, EYM, PSY
- 334 Hsu, S-Y. Progress in perceptually-based feature extractors for image processing. American Society of Photogrammetry 46th Annual Meeting, St. Louis, MO, March 9-14, 1980. ASP Technical Papers, 1980, 507-515.
CTL, REV
- 335 Hsu, S-Y., Purright, R.G. Texture perception and the RADC/NSU texture feature extractor. Photogrammetric Engineering and Sensing, Vol. 46, Aug. 1980, 1051-1056.
CTL
- 336 Hughes, R.L. Test Anxiety, Electromyographic Response to Stress and Reflective Gaze Preference. Frank J. Seiler Research Laboratory, United States Air Force Academy Company, Report no. FJSL-TR-79-0009, October 1979.
PHY, IED
- 337 Hunt, G.H. Airborne electronic displays. IEEE Proceedings, Part A - Physical Science, Measurement and Instrumentation, Management and Education, Reviews 1981, Vol. 128, Pt. A, No. 4, p.225,243.
FOD
- 338 Hunteon, R.F.; Schohan, P.; Silvern, U. Visual Search Performance in Simulated Remotely Piloted Vehicle Utilization as a Function of Auxilliary Task Loading on the Observer. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA, Final Report, April 1979.
VIS, PEF, EOD
- 339 Hutton, J.T., Johnston, C.W., Shapiro, I., Pirozzolo, J.J. Oculomotor programming disturbances in the cerebellar syndrome. Perceptual and Motor Skills, 1979, 49, 312-314.
EYM, AER
- 340 Hyde, J.F. Some characteristics of voluntary human ocular movements in the horizontal plane. American Journal of Ophthalmology, 1959, 48, 85-94.
EYM, SAC
- 341 Inchingolo, P.; Bon, L.; Corazza, R. Analogue analyser for on-line eye movement detection. Electroencephalography and Clinical Neurophysiology, 1979, 46, 110-13.
INS

- 342 Ingling, M.W. Categorization: a mechanism for rapid information processing. Journal of Experimental Psychology, 1972, 94, 239-243.
PSY
- 343 Intraub, H. The role of implicit naming in pictorial encoding. Journal of Experimental Psychology: Human Learning and Memory, 1979, 5, 78-87.
PSY, PIC
- 344 Intraub, H. Selective attention for a subset of sequentially presented scenes. Presented at the 87th Annual Meeting of the American Psychological Association, New York, 1979.
ATT
- 345 Ivanoff, A. About the spherical aberration of the eye. Journal of the Optical Society of America, 1956, Vol. 46, p.901.
PHY
- 346 Jameson, D., Hurvich, L. (Eds.) Handbook of Sensory Physiology, Visual Psychophysics. Springer-Verlag: New York, 1972, Vol. 7, part 4.
PHY, PSY, PCF
- 347 Jenkins, D., Wickman, A. Development of an aviator's night vision imaging system/ANNISI. In: Optomechanical Systems Design; Proceedings of the Seminar, San Diego, CA, July 31, 1980. Society of Photo-Optical Instrumentation Engineers, 1980, p10-23.
PCD
- 348 Jennings, J.A., Charman, W.N. Off-axis image quality in the human eye. Vision Research, 1981, Vol. 21, No. 4, p.445-55.
PHY, PSY
- 349 Jernigan, K.E., Wardell, R.W. Does the eye contain optimal edge detection mechanisms? Man and Cybernetics, 1981, Vol. SMC-11, No. 6, p.441-4.
CTL
- 350 Jernigan, K.E. Visual field plotting using eye movement response. IEEE Transactions on Biomedical Engineering, 1979, 26, 11.
ATT, PSY
- 351 Johannsen, C. Monitoring and Decision Making by People in Man Machine Systems. National Aeronautics and Space Administration, Washington DC, Report no. NASA-CR-164026, May 1979.
EYE, ATT

- 352 Johnson, A.E.; Cowden, D.C. Considerations in specifying display system CRT design objectives. Information Display, May/June 1967.
EOP
- 353 Johnson, C.A., Keltner, J.L., Balestrery, F. Effects of target size and eccentricity on visual detection and resolution. Vision Research, 1978, 18, 1217-1222.
TCP, PER, TAC, FOV
- 354 Johnston, C.W.; Pirozzolo, F.J. Eye movements and cognitive strategies. Perceptual and Motor Skills, 1981, 52, 623-32.
EYM, PSY
- 355 Jorides, J., and Gleitman, H. The benefit of categorization in visual search. Perception and Psychophysics, 1976, 20, 289-298.
VIC, PSY, REE
- 356 Jones, I., Piggins, G. Journal of the Optical Society of America, 1948, Vol. 38, p.398.
PHY, FOV, EIV
- 357 Julesz, J. Texture, the elements of texture perception, and their interactions. Nature, 1961, Vol. 290, No. 5802, p.91-7.
PHY, PSY, TCP
- 358 Jung, R. (Ed.) Central processing of visual information. New York: Springer-Verlag, 1973.
PSY, ROK
- 359 Jurgens, R., Decker, M., Kornhuber, H.H. Natural and drug-induced variations of velocity and duration of human saccadic eye movements: evidence for a control of the neural pulse generator by local feedback. Biological Cybernetics, 1981, Vol. 39, No. 2, p.87-96.
SAC, EYM, AEN, CTL
- 360 Kaestner, P.T. Visual Simulation. Information Display 1967, (March/April).
CTL
- 361 Karpov, B.A.; Luria, A.R.; Yarbus, A.L. Disturbances of the structure of active perception in lesions of the posterior and anterior regions of the brain. Neuropsychologia, 1968, 6, 157-166.
EYM, APN, PHY

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permit fully legible reproduction

- 362 Kasai, T. Control Mechanisms of eye movements. Journal of the Society of Instrumentation and Control Engineers, 1980, 19, 760-71.
CTL, EYM
- 363 Kaster, J. Graphic system supports for eye movement analysis. S.I.D. International Symposium, 1981, Draft of Papers, Vol. XII, 28-30 April, 1981, p.54-5.
INS
- 364 Kawabata, M.; Yamagami, K.; Kato, T. Analysis of cognitive processes based on a measurement of visual fixation points. Transcripts of the Institute of Electronics and Communications Engineering of Japan, Section E, 1977, E60, 591-2.
EYM, FIX, PSY
- 365 Keesey, V.T. Journal of the Optical Society of America, 1960, 50, 769.
TAC
- 366 Kertesz, A.E. Effect of stimulus size on fusion and vergence. Journal of the Optical Society of America, 1981, Vol. 71, No. 3, p.289-93.
TCH
- 367 Ketchel, J.M.; Jenney, L.L. Electronic and optically generated aircraft displays: A study of standardization requirements. JANAIIR Report No. 68050, 1968.
EOD
- 368 Khomskaya, E.D. On the problem of afferentation of eye movements. A study of eye movements using a photoelectric method. Royal Aircraft Establishment, Farnborough, Report no. RAE-LIR-TRANS-11280, January, 1968. Translated from Vopr. Psikhologii., 1962, 3, 73-84.
PSY, PHY, INS
- 369 Kincaid, J.P.; Silbernagel, B.L. Development of a target acquisition model: effect of sensor/display and scene characteristics. Fort Belvoir, VA., NVL Report, OR 15, 052, 1978.
TAQ, MOD, MET
- 370 King, M.G.; Burrows, G.D.; Stanley, G.V. Psychological Aspects of Camouflage Design and Detection: Stress and Visual Information Processing. Logistic Command (DoD), Melbourne (Australia), September 1981.
PSY, CAM, TAQ

- 371 Klein, R. Does Oculomotor Readiness Mediate Cognitive Control of Visual Attention? In: R.S. Nickerson (Ed.) Attention and Performance VIII. New York: Lawrence Erlbaum Associates, 1980.
ATT, PSY, EYM
- 372 Klein, R.; Jex, H.R. An eye-point-of-regard system for use in scanning and display research. Proceedings of the SPIE 15th Annual Technical Symposium. Photo-optical instrumentation for the 70's. Anaheim, CA, 14-17 September, 1970, 543-51. Washington, DC: Society of Photo-optical Instrumentation Engineers, 1971.
INS
- 373 Kleitman, R.; Elier, Z.A. Color and form discrimination in the periphery of the retina. American Journal of Physiology, 1978, 85, 178-190.
PER, FOR, TCH
- 374 Kliegl, R. Automated and interactive analysis of eye fixation data in reading. Behavior Research Methods and Instrumentation, 1981, 13, 115-120.
INS, MED
- 375 Kliegl, R.; Olson, R.K. Reduction and calibration of eye movement data. Behavior Research Methods and Instrumentation, 1981, 13, 107-111.
INS
- 376 Kluver, H. (Ed.) Visual Mechanisms. Lancaster, Pa: Cattell, 1942.
DOK
- 377 Kobrick, J.L. Size, Distance and Peripheral Position Effects on Target Detection. Army Research Institute of Environmental Medicine, Natick, MA, Report no. USARIEM-M-13/79, 21 May, 1979.
TAG, PER, TCH
- 378 Kohler, W.; Wallach, H. Proceedings of the American Philosophical Society, 1944, Vol. 88, p.269.
CTL, MOD
- 379 Korth, H. Human fast retinal potentials and the spatial properties of a visual stimulus. Vision Research, 1981, Vol. 21, No. 5, p.627-30.
TCH, PHY
- 380 Kolars, P.A.; Duchnick, R.L.; Ferguson, D.C. Eye Movement Measurement of Readability of CRT Displays. Human Factors, 1981, 23, 517-27.
EYM, EOD

- 381 Komoda, M.K.; Festinger, L.; Phillips, L.J.; Duckman, R.H.; Young, R.A. Some Observations concerning Saccadic Eye Movements. Vision Research, 1973, 13, 1009-1020.
EYM, SAC
- 382 Korn, A.F. Visual Search: Relation between detection performance and visual field size. Proceedings of the 1st European Annual Conference on Human Decision Making and Manual Control, Delft, 1981, 27-34.
VIS
- 383 Korth, H. Human Fast Retinal Potentials and the Spatial Properties of a Visual Stimulus. Vision research, 1982, 21, 627-30.
PHY, TCH
- 384 Kosugi, Y.; Ohnishi, A.; Ikebe, J.; Yasuda, K.; Kumagai, Y. Quantitative evaluation of saccadic eye movement disorders under random visual stimuli on CRT. IEEF Transcripts on Biomedical Engineering. Vol. BME-29, p.184-92.
EYM, SAC, ABN, EOD
- 385 Kowler, E. Eye movements and visual information processing. Air Force Office of Scientific Research, Bolling AFB, DC, Final Report, 16 December 1981.
EYM, PSY
- 386 Kowler, E.; Steinman, R. The effect of expectations on slow oculomotor control. I. Periodic target steps. Vision Research, 1979, 19, 619-32.
PSY, EYM
- 387 Kowler, E.; Steinman, R.M. The effect of expectations on slow oculomotor control. II. Single target displacements. Vision Research, 1979, 19, 633-646.
PSY, EYM
- 388 Kowler, E.; Steinman, R.M. Miniature Saccades: eye movements that do not count. Vision Research, 1979, 19, 105-8.
EYM, INV
- 389 Kraft, C.L.; Anderson, L.D.; Elworth, C.L. Pilot performance as a function of peripheral cues and colour in computer generated images. Summer Computer Simulation Conference, Seattle, WA, August 25-27, 1980, Proceedings. EOD, PER
- 390 Kraiss, K.F.; Knaeper, A. Prediction of visual search performance based on visual lobe measurements. Proceedings of 1st European Annual Conference on Human Decision Making and Manual Control, Delft, 1981, pp. 12-26.
VIS, PER

- 391 Kraiss, E.F.; Schubert, E. Matching image resolution to the eye resolution. SID International Symposium (Digest of Technical Papers), 1977, pp.44-45. Los Angeles, CA: Society for Information Display, 1977.
IMG, PHY, EOD
- 392 Krauskopf, J.; Cornsweet, T.; Riggs, L.A. Analysis of eye movements during monocular and binocular fixation. Journal of the Optical Society of America, 1960, 50, 572-81.
EYM, FIX, INV
- 393 Krebs, H.J.; Corence, L. Real-time display parameter study II. Honeywell Incorporated, Report no. RADCO-TR-75-43, 1975.
INS
- 394 Krebs, H.J.; Graf, C.P. Real-time display parameter study. Honeywell Incorporated, Report no. RADCO-TR-73-300, 1973.
INS
- 395 Krestel, E. Display techniques for medical diagnosis. Elektrotechnische Zeitung, 1981, Vol. 102, No. 9, p.473-7.
IMG
- 396 Krueger, L.E. Visual comparison in a redundant display. Cognitive Psychology, 1970, 1, 341-357.
PSY
- 397 Krueger, L.E. Familiarity effects in visual information processing. Psychological Bulletin, 1975, 82, 949-974.
PSY
- 398 Kruglov, S.I. The transient characteristic of the eye movement mechanism of man. Soviet Journal of Optometry and Technology, 1977, 44, 57-8.
EYM
- 399 Kuborg, M.; Pomerantz, J.R. (Eds.) Perceptual organization. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
PSY, BOK
- 400 Kulikowski, J.J. Vision Research, 1971, 11, 261.
EYM, FOV, TCH
- 401 Kundel, H.L.; Nodine, C.F.; Carmody, D. Visual Scanning, Pattern Recognition and Decision-Making in Pulmonary Nodule Detection. Investigative Radiology, 1978, 13, 175-181.
EYM, VIS

- 402 Kundel, H.L.; Revesz, G.; Toto, L. Contrast Gradient and the Detection of Lung Nodules. Investigative Radiology, 1979, 14, 18-22. TAG, IMG, VIS
- 403 Kuperman, C.G.; Gliatti, E.L. A comparison of two subjective-image quality assessment methods. Journal of Applied Photographic Engineering 1981, Vol. 7, No. 1, p.14-20. IMG
- 404 Kushnir, V.I.; Petrova, L.F.; Smirnov, V.P. The spatial-temporal characteristics of vision when an observer is solving a search problem. Soviet Journal of Optical Technology (USA), 1975, 42, 498-500. VIS, EYM
- 405 Lachner, J.R.; Levine, M.S. The guidance of saccadic eye movements to perceptually mislocated visual and non-visual target. NASA-15147 Aviation Space and Environmental Medicine, Vol. 52, August 1981, p.461-465. EYM, SAC, TCH
- 406 Lai, D.C. Biocybernetic factors in human perception and memory. Stanford University Center for Systems Research, Technical Report, 1975, 6741-6745. CTL, GEN
- 407 Lamer, E.S. Vision in Air Sea Rescue Search. Center for Naval Analysis, Arlington, VA, Operations Evaluation Group, Report no. OLC-Study-250), February, 1946 (limitation now removed). AIR, VIS, TAG, CTL
- 408 Landers, P. The apparent use of optimal control strategies in the mammalian neuro-musculature. IFE International Conference on Control and its applications, Coventry, England, 23-25 March, 1981, 48-51. London: IEE, 1981. PHY, CTL, STM
- 409 Lancraft, R.; Zacharias, G.; Baron, S. Pilot/Vehicle model analysis of visual and motion cue requirements in flight simulation. In: Flight Simulation Technologies Conference, Long Beach, CA, June 16-18 1981, Technical Papers. American Institute of Aeronautics and Astronautics, Inc., 1981, p.49-59. MOD, EOD
- 410 Langner, G.O. Light gating brightens CRT image for large projection displays. Electronics, 1970, Dec. 7. EOD, IMG
- 411 Lasley, D.J.; Cohn, T.E. Why luminance discrimination may be better than detection. Vision Research, 1981, 21, 273-8. PSP, PSY

- 412 Lassig, P. The signal-flow diagram of the oculomotor control system-and its transferability to the more intricate skeletomotor control system. Biological Cybernetics, 1977, 25, 205-8.
CTL, PHY
- 413 Latour, P. Vision Research, 1962, Vol.2, 261.
EYM, SAC
- 414 Latour, P.L. Cortical control of eye movements. Institute for Perception, FVO-TMD, Soesterberg (Netherlands), Report no. TDCK-46512, 12F-1966-12, 1966.
PHY, EYM
- 415 Lawson, W.R.; Cassidy, T.W.; Ratches, J.A. A search model. Presented at IRIS Speciality Group on Imaging, June 1978. Fort Belvoir, Virginia: Night Vision and Electro-Optics Laboratories, 1978.
MOD, EOD
- 416 Lawson, W.; Shields, F. E-O system evaluation at NV & EOL. Fort Belvoir, Virginia: Night Vision and Electro-Optics Laboratory, Visionics Division, 1980.
MOD, EOD
- 417 Lee, L.C.; Fu, K.S. The GLGS image representation and its application to preliminary segmentation and preattentive visual search. IEEE Computer Society Conference on Pattern Recognition and Image Processing, Dallas, TX, 3-5 August 1981, 256-61.
AID, VIS, CTL
- 418 Lefton, L.A.; Fisher, D.F. Information Extraction During Visual Search: A Developmental Progression. Journal of Experimental Child Psychology, 1976, 22, 346-31.
VIS, PSY, DEV, RED
- 419 Legge, G.E.; Foley, J.H. Contrast masking in human vision. Journal of the Optical Society of America, 1980, Vol. 70, No. 12, p.1458-71.
INT
- 420 Legge, G.E. A power law for contrast discrimination. Vision Research, 1981, Vol. 21, No. 4, p.457-67.
PSP
- 421 Lehman, S.; Stark, L. Simulation of linear and nonlinear eye movement models: sensitivity analyses and annumeration studies of time optimal control. Journal of Cybernetics and Information Science, 1979, 2, 21-43.
CTL, EYM, MOD

- 422 Lehtela, J. Differences in eye movement data recorded by electro-oculography and corneal reflection techniques. Human Factors, 1981, Vol. 23, p.661-665.
INS, EYM
- 423 Lennie, P. The physiological basis of variations in visual latency. Vision Research (GP), 1981, Vol. 21, No. 6, p.815-24.
PHY
- 424 Lennie, P.; Sidwell, A. Saccadic eye movements and visual stability. Nature, 1978, 275, 766-8.
EYM, SAC
- 425 Levenston, A.G. An optical simulation of the visual model VISIVE. PAC (GW) report ST19416, 1977.
MOD
- 426 Levi, L. Types of noise in the visual system. Optical Engineering, 1981, Vol. 20, No. 1, p.98-102.
PHY
- 427 Levin, H.; Kaplan, E.L. Grammatical structure and reading. In: H. Levin & J.P. Williams (Eds) "Basic studies on reading". New York: Basic Books, 1970.
RFD, PSY, EYM
- 428 Levine, H.P.; Shakeeh, S.I. A modular computer vision system for picture segmentation and interpretation. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1981, Vol. PAMI-3, p.540-556.
CTL, PSY
- 429 Levy-Schoen, A. L'etude des mouvements oculaires. Revue des techniques et des connaissances. Paris: Dunod, 1969.
EYM, REV, MET, BOK
- 430 Levy-Schoen, A. Determination et latence de la reponse oculomotrice a deux stimulus simultanes ou successifs selon leur excentricite relative. L'Annee Psychologique, 1969, 69, 373-392.
EYM, PER
- 431 Levy-Schoen, A. Le champ d'activite du regard: donnees experimentales. L'Annee Psychologique, 1974, 74, 43-66.
PER
- 432 Levy-Schoen, A. Flexible and/or Rigid Control of Oculomotor Scanning Behavior. In: D.F. Fisher, R.A. Monty, J.W. Senders (Eds.). Eye Movements: Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
EYM

- 433 Levy-Schoen, A.; Rigaut-Renard, C. Pre-reception ou activation motrice au cours du T.R. oculomoteur? In: J. Requin (Ed), Anticipation et comportement. Paris: Editions du CNRS, 1979.
EYM, PSY
- 434 Lillywhite, P.C. Multiplicative intrinsic noise and the limits to visual performance. Vision Research, 1981, Vol. 21, No. 2, p.291-6.
PHY
- 435 Lindsay, P.H.; Norman, D.A. Human Information Processing. Academic Press, New York, 1972.
PSY, ECK
- 436 Ling, B.C. A genetic study of sustained fixation and associated behaviour in the human infant from birth to six months. Journal of Genetic Psychology, 1942, 61, 227-271.
FIX, DEV
- 437 Llewellyn-Thomas, E. Eye movements and fixations during initial viewing of Rorschach cards. Journal of Projective Techniques and Personality Assessment, 1963, 27, 345-349.
EYM, FIX, FRE
- 438 Locher, P.; Rodiere, C. The influence of visual symmetry on visual scanning patterns. Perception and Psychophysics, 1973, 13, 408-412.
STR, EYM, FOR
- 439 Locher, P.J.; Simmons, R.W. Influence of stimulus symmetry and complexity upon haptic scanning strategies during detection learning and recognition strategies. Perception and Psychophysics, 1978, 23, 110-116.
TCH, STR, EYM, TRA, REC
- 440 Loftus, G.R. Eye fixations and recognition memory for pictures. Cognitive Psychology, 1972, 3, 525-551.
FIX, REC, MEM, PIC
- 441 Loftus, G.R. Cognitive factors controlling visual search in pictures. Proceedings of the Tenth Symposium of the Center for Visual Science, Rochester, N.Y., 1977, 22-23.
PSY, VIS, PIC
- 442 Long, G.M.; Waag, W.L. Limitations on the Practical Applicability of d' and measures. Human Factors, 1981, 23, 285-290.
CTL, MOD
- 443 Long, J.; Baddeley, A. (Eds.) Attention and performance IX. Part II: Perception of Scenes and Visual Objects. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977.
ATT, BOK, FRE, PSY

- 444 Luria, S.M.; Strauss, M.S. Eye-Movements During Search for Coded and Uncoded Targets. Naval Submarine Medical Research Laboratory, Groton, Connecticut, Report no. NSMRL-787, June, 1974.
EYM, VIS, TCH
- 445 Luxembourg, H.R.; Kuehn, R.L. Display Systems Engineering. New York: McGraw-Hill, EOD, EOK
- 446 Lynch, J.C.; Mountcastle, V.E.; Talbot, W.H.; Yin, T.C.T. Parietal lobe mechanism for directed visual attention. Journal of Neurophysiology, 1977, 40, 362-309.
PHY, ATT
- 447 Mackie, R.R.; Harabedian, A. A study of simulation requirements for sonar operator trainees. US Naval Training Device Center, Technical Report No. 1320-1, 1964.
NET, MOD, CTL, TRA
- 448 Maffizzoli, A. An annotated bibliography on eye movements while reading. Atti Fondazione Giorgio Ronchi, 1977, 32, 1039-51.
EYM, RED, PEV
- 449 Malmstrom, F.V.; Bahde, R.J.; Murphy, M.R.; Reed, L.E.; Weber, R.J. Visual fatigue - the need for an integrated model. Psychonomic Society Bulletin, 1981, Vol. 17, No. 4, p.183-186.
PHY, MOD, PAT
- 450 Mansfield, R.J.W. Predictive Models of Human Visual Processes in Aerosystems. Air Force Office of Scientific Research, Bolling, AFB, DC, Annual Report, October 1978.
MOD, EYM, EOD
- 451 Marcel, A.J. Perception with and without awareness. Paper presented to Meeting of the Experimental Psychology Society, Stirling, July 1974.
PSY
- 452 Marr, D.; Poggio, T.A. A computational theory of human stereo vision. Proceedings of the Royal Society, London, 1979, 204B, 301-328.
CTL, MOD
- 453 Marshall, A.H.; Bond, G.M. Circuit for calculating the position of the eye. Department of the Navy, Washington, DC, Report no. PAT-APPL-6-262152 . 11 May, 1981.
INS

- 454 Martinek, H.; Sadacca, R. Error keys as reference aids in image interpretation. US Army Personnel Research Office, Washington. Technical Research Note 153, 1965.
AID
- 455 Martins, A.J.; Kowler, E. Eye movements of preschool children. Science, 1982, 215, 997-9.
EYM, DEV
- 456 Martynov, V.N.; Shkurskii, B.I. Model of visual analyzer as optimum detection system. Soviet Journal of Optical Technology, 1980, Vol. 47, No. 6, p.437-40.
MOD, CTL
- 457 Masou, K.A.; Merchant, J.; Wilson, L. A Program to Investigate the Feasibility of Utilizing the Oculomotor Measurement Technique in the Photointerpretation Task. Honeywell Radiation Center, Lexington, Mass.; Final technical report, February, 1969.
MIT, INS
- 458 Mason, R.L. Visual sampling on a simulated DIMPUS-type display. Naval Underwater Systems Center, New London, Connecticut, New London Laboratory, Report no. NUSC-TR-4861, 27 January, 1975.
EOD, VIS, STR
- 459 Mason, R.L. Digital computer estimation of eye fixations. Behavior Research Methods and Instrumentation, 1976, 8, 185-8.
INS
- 460 Massaro, D.W. Primary and secondary recognition in reading. In D.W. Massaro (Ed.), "Understanding language". New York: Academic Press, 1975.
REC, RED
- 461 Mateev, S.T. Kinematic characteristics of voluntary saccadic eye movements. Izv. Inst. Fiziol. (Bulgaria), 1972, 14, 35-45.
SAC
- 462 Matin, L.; Pola, J.; Matin, E.; Picoult, E. Vernier discrimination with sequentially-flashed lines: roles of eye movements retinal offsets and short-term memory. Vision Research, 1981, Vol. 21, No. 5, p.647-55.
EYM, MEM, TCH
- 463 McConkie, G.W. Evaluations and reporting data quality in eye movement research. Behavior Research Methods and Instrumentation, 1981, 13, 97-106.
EYM, REV

- 464 McConkie, G.W.; Rayner, K. The span of the effective stimulus during a fixation in reading. Perception and Psychophysics, 1975, 17, 578-586.
FIX, RED
- 465 McCormack, P.D. Monitoring eye movements during the learning of paired-associate lists. Michigan University, Ann Arbor, Human Performance Center, Report no. TR-20, 09773-57-T, March 1970.
EYN, MEM
- 466 McElligott, J.G.; Loughname, M.H.; Mays, L.E. The use of synchronous demodulation for the measurements of eye movements by means of an ocular magnetic search coil. IEEE Transactions on Biomedical Engineering, 1979, vol, BME-26, 370-4.
INS
- 467 McFarland, J.H. "Parts" of perceived visual forms: new evidence. Perception and Psychophysics, 1968, 3, 118-120.
FOR, PSY
- 468 Messer, S.P. Reflection - impulsivity: a review. Psychological Bulletin, 1976, 83, 1026-1052.
PSY
- 469 Miller, J.M. Visual behaviour changes for student pilots flying instrument approaches. Proceedings of the 17th Annual Meeting of the Human Factors Society, in Santa Monica, 1973, 208-214. Santa Monica, CA: Human Factors Society Inc., 1973.
TRA, EYN
- 470 Miller, J.M.; Gatchell, S.F.; Dykstra, D.R. The visual behaviour of recreational boat operators and its relationship to boat collisions, 1977. University of Michigan, Dept. of Industrial and Operations Engineering.
CO-31-77
EYM
- 471 Millodot, M.; Johnson, C.A.; Lamont, A. & Leibowitz, H.W. Effects of dioptics on peripheral visual acuity. Vision Research, 1975, 15, 1357-1362.
PER, PHY
- 472 Ming-Duenn, M. A minicomputer program for automatic saccade detection and linear analysis of eye movement systems using sine wave stimulus. Computer Programs for Biomedicine, 1980, 12, 27-41.
INS

- 473 Minsky, M.L.; Pappart, S. Perceptrons. Cambridge, MA: MIT Press, 1969.
POK
- 474 Mishkin, M. & Forays, D.G. Word recognition as a function of retinal locus. Journal of Experimental Psychology, 1952, 43, 43-48.
REC, RED, PER
- 475 Mit'kin, A.A.; Yamchikov, A.A. Mechanisms of eye movements. Human Physiology, 1978, 4, 773-779. (Translated from Fiziol. Chel.).
EYM, PHY
- 476 Miura, T. Comportement visuel dans la conduite automobile. Etude des mouvements oculaires. Bulletin of the Human Sciences Faculty, University of Osaka, 1979, vol.5.
EYM
- 477 Miyoshi, T.; Hiwatashi, S.; Kishimoto, S.; Tamada, A. Dissociation of the eyes in saccadic movement. New York Academy of Sciences, Annals, 1981, Vol. 374, p.713-743.
SAC, EYM
- 478 Mohler, C.W.; Goldberg, M.E.; Wurtz, R.H. Visual receptive fields of frontal eye field neurons. Brain Research, 1973, 61, 385-389.
PHY
- 479 Monk, T.H. The interaction between the edge effect and target conspicuity in visual search. Human Factors, 1981, Vol. 23, p.615-625.
VIS, TCH
- 480 Monty, R.A. An advanced eye-movement measuring and recording system. American Psychologist, 1975, 30, 331-335.
INS
- 481 Monty, R.A.; Senders, J.W. Eye movements and psychological processes. Hillsdale, NJ: Lawrence Erlbaum Assoc.; 1976.
EYM, PSY, BOK
- 482 Mooney, C.M. Recognition of novel visual configurations with and without eye movements. Journal of Experimental Psychology, 1958, 56, 113-138.
REC, EYM
- 483 Morrison, R.E.; Inhoff, A-W. Visual factors and eye movements in reading. Visible Language, XV, 2, 1981, 129-146.
EYM, RED

- 484 Morton, J. The effects of context upon speed of reading, eye movements and eye-voice span. Quarterly Journal of Experimental Psychology, 1964, 16, 340-354.
CXT, RED, EYM, PSY
- 485 Moskowitz, H.A.; Ziedman, K.; Sharma, S. Effect of Marijuana and Alcohol on Visual Search Performance. National Highway Traffic Safety Administration, Washington, DC, Report no. UCLA-ENG-7615, October, 1976.
VIS, ABN
- 486 Moss, S.M.; Hearn, J.F.; Sourard, J.B. Factors Affecting Information Processing in Short-term Memory. Massachusetts University, Amherst, report no. 2, December 1966.
MEM, STR, PSY, VIS
- 487 Mourant, R.R.; Langhnan, R.; Chantadisai, R. Visual fatigue and cathode ray tube display terminals. Human Factors, 1981, Vol. 23, p.529-549.
PHY, EOD, FAT
- 488 Mowery, R.R.; Rockwell, T.H.; Rackoff, N.J. Drivers' Eye Movements and Visual Workload. Highway Research Record, 1969, No. 292, 1-10.
EYM, PSY
- 489 Mowery, G.; Milelli, R.J.; McDonald, L.B.; Fontelandolfo, C.; Huggie, P. Helicopter night vision system simulation experiments. American Helicopter Society, Annual Forum, 37th, New Orleans, LA, May 19-20 1981. Proceedings p. 163-178.
EOD, EYM
- 490 Nachmias, J. Journal of the Optical Society of America, 1959, Vol. 49, p.901.
SAC, INV, EYM
- 491 Nachmias, J. On the psychometric function for contrast detection. Vision Research, 1981, Vol. 21, No. 2, p.215-23.
PSY
- 492 Nassof, R.W. Wavelength dependence of the shape of foveal absolute threshold probability of detection functions. Vision Research, 1981, Vol. 21, No. 7, p.995-1004.
FOV, THR, TCH
- 493 Navon, D. Forest before trees: the precedence of global features in visual perception. Cognitive Psychology, 1977, 9, 353-383.
PSY

- 494 Neboit, M.; Papin, J.P.; Pottier, A.; Puimean-Chieze, J.P.; Viard, D. Choix et Techniques d'Analyse d'Indices de la Prise d'Informations Visuelles. Medecine Aeronautique et Spatiale, Medecine Subaquatique et Hyperbare, 1978, 17, 29-44.
INS
- 495 Neboit, M.; Saillour, A. Apprentissage des activites previsionnelles du conducteur. Etude des activites perceptives du conducteur. Phase I: Note methologique et technique. Document ONSER, 1976.
MET, INS
- 496 Neboit, M.; Saillour, A. Calibrage de l'appareil NAC Eye Marker en laboratoire. Document ONSER, February, 1976.
INS
- 497 Neisser, U. Cognitive Psychology. New York: Appleton-Century-Crofts, 1967.
PSY, BOK
- 498 Neisser, U. Cognition and Reality. San Francisco: W.H. Freeman, 1976.
PSY, BOK
- 499 Neisser, U.; Lazar, R. Searching for Novel Targets. Branders University, Waltham, Mass.; July, 1964. (Distribution limitation now lifted).
VIS, TCH
- 500 Nelson, C.L.; London, R.M.; Robinson, G.H. Effects of Information Processing Requirements on Reaction Time of the Eye. Wisconsin University, Madison, Report no. TH-78-10, September 1978.
EYM, PSY
- 501 Nesteruk, V.F.; Sokolova, V.A. Questions in subjective image perception theory and the quantitive evaluation of their contrast. Soviet Journal of Optical Technology, 1980, Vol. 47, No. 5, p.266-8.
PSP
- 502 Nettlebeck, T. Inspection time: An index for intelligence? Quarterly Journal of Experimental Psychology, 1982, 34A, 299-312.
VIS, PSY
- 503 Noaki, M.; Yamagami, K.; Kawabata, N. A system for measuring eye movement and its psychophysical experiment. Bulletin of theElectrotechnical Laboratory, (Japan), 1975, 39, 656-66.
INS, PSP

- 504 Nodine, C.F.; Carmody, D.P.; Herman, E. Eye Movements During Search for Artistically Embedded Targets. Bulletin of the Psychonomic Society, 1979, 13, 371-74.
EYM, VIS, CAM
- 505 Nodine, C.F.; McGinnis, J.J. A head-mounted display holder for eye movement recording. Behavioral Research Methods and Instrumentation, 1979, 11, 427-8.
INS
- 506 Nooteboom, S.G. & Cohen, A. Anticipation in speech production and its implications for perception. In A. Cohen & S.G. Nooteboom (Eds) "Structure and process in speech perception". Heidelberg: Springer, 1975.
PSY
- 507 Norman, D.A. Perspectives on Cognitive Science. New Jersey: Ablex Publishers, 1981.
PSY, EOK
- 508 Norman, D.A. & Bobrow, D.G. On data-limited and resource-limited processes. Cognitive Psychology, 1975, 7, 44-64.
PSY
- 509 Noton, D.; Stark, L. Scanpaths in saccadic eye movements while viewing and recognising patterns. Vision Research, 1971, 11, 929-942.
EYM, STR, REC, FOR
- 510 Noton, D. & Stark, L. Scanpaths in eye movements during pattern perception. Science, 1971, 171, 308-311.
EYM, STR, FOR
- 511 Ohlander, R.B. Analysis of natural scenes. Unpublished doctoral dissertation. Carnegie-Mellon University, 1975.
EYM, PIC
- 512 Ohtani, A. An Analysis of Eye Movements during a Visual Task. Ergonomics 1971, 14, 167-174.
EYM, VIS
- 513 O'Keefe, M.J. Evaluation of Human Encoding Performance with Varied Display Media. Naval Postgraduate School, Monterey, CA, Master's Thesis, June 1976.
EOD, PSY
- 514 Ono, H.; Tam, W.J. Asymmetrical vergence and multiple saccades. Vision Research, 1981, Vol. 21, No. 5, p.739-43.
SAC, EYM

- 515 O'Regan, J.K. The control of saccade size and fixation during reading: the limits of linguistic control. Perception and Psychophysics, 1980, 28, 112-117.
SAC, EYP, FIX, RED, PSY
- 516 Osgood, C.E.; Meyer, A.W. Psychological Review. 1952, Vol. 59, p.98.
FOR, CTL, MOD
- 517 Osipova, .; Mateeva, .; Potikhonova, . Search for objects in a sector during telescope viewing. Soviet Journal of Optical Technology, 1976, 44, 72-75.
VIS
- 518 Overington, I. Visual efficiency: a means of bridging the gap between subjective and objective quality. In: Proceedings of the SPIE, 1974, Vol. 46, Image Assessment and Specification, 93.
PSP
- 519 Overington, I. Practical application of contrast sensitivity for the determination of the performance of visual aids plus observer. EAC (GW) Report STI 3071, 1975.
AID
- 520 Overington, I. A short survey of variations in size/contrast thresholds for simple stimuli between experimenters. EAC (GW) Report ST13980, 1975.
TCH
- 521 Overington, I. Vision and Acquisition. Pentech Press, London: 1976.
TAQ, BOK
- 522 Overington, I. VISIVE - a visual detection model. EAC (GW) Report ST18028, 1977.
MOD, TAQ
- 523 Overington, I. 'UK Oracle: An acquisition model' BAe, GW Limited, Filton Report ST17153, 1977.
MOD
- 524 Overington, I. The ORACLE visual detection model - reassessment of the multiple glimpse situation. B.Ae.D. Ref. 821/G.313, 1978.
MOD
- 525 Overington, I. Modelling of search probability functions. B.Ae.D. Report ST23216, 1979.
MOD

- 526 Overington, I. Modelling of recognition thresholds for high contrast stimuli using ORACLE. E.Ae.D. Report ST22287, 1979.
MOD, REC, THR, TCH
- 527 Overington, I. Modelling of visual threshold performance with imperfect imagery. B.Ae.D. Report, ST23214, 1980.
MOD, THR, IMQ
- 528 Overington, I. Modelling of MRTD curves using ORACLE. E.Ae.D. Report BT10490, 1980.
MCD
- 529 Overington, I.; Crowther, A.G. The influence of noise and quality on subjective performance. In: Proceedings of SPIE, 1976, Vol. 98, Assessment of Imaging systems, 65.
IMQ
- 530 Ozkaptan, H.; Omart, J.G.; Bergert, J.W.; McGee, R.A. Martin Marietta Corporation, Orlando, FLA, Orlando Division, Report no. OR-9656, October 1968.
TAG, EOD, REC, PSY, VIS
- 531 Palmer, S.E. Visual perception and world knowledge: notes on a model of sensory-cognitive interaction. In: D.A. Norman; R.E. Rumelhart (Eds.), Explorations in Cognition. San Francisco: W.H. Freeman, 1975.
PSY
- 532 Palmer, S.E. The effects of contextual scenes on the identification of objects. Memory and Cognition, 1975, 3, 519-526.
REC, CTX
- 533 Papin, J.P.; Naurells, P.; Santucci, G. Pickup of visual information by the pilot during ground control approach in a flight aircraft simulator. Aviation Space, and Environmental Medicine, May, 1980.
PSY, AIR
- 534 Parker, R.E. Picture processing during recognition. Journal of Experimental Psychology: Human Perception and Performance, 1978, 4, 284-293.
PIC, REC, PSY
- 535 Pavlidis, G.Th. Accurate device for automatic timing and counting of eye movements. Perceptual and Motor Skills, 1980, 50, 971-976.
INS
- 536 Pearce, D.G.; Porter, E. Changes in visual sensitivity associated with voluntary saccades. Psychonomic Science, 1970, 19, 225-27.
EYM, SAC

- 537 Pepper, R.L.; Smith, D.C.; Cole, R.E. Stereo TV improves operator performance under degraded visibility conditions. Optical engineering, 1981, Vol. 20, No. 4, p.579-85.
EOD, AID
- 538 Percival, L.C. Sustained search: Number of background characters, target type, and the time on watch. Proceedings of the Human Factors Society, 25th Annual Meeting, 1981, 283-85.
VIS, TCH, VIG
- 539 Petersen, H.E.; Dugas, D.J. The relative importance of contrast and motion in visual target detection. Rand Corporation, Santa Monica, CA, Report no. R-688-PR, March 1971.
TCH, TAQ
- 540 Petrov, A.P.; Zankin, G.M. Torsional eye movements and constancy of the visual field. Vision Research, 1973, 13, 2465-77.
EYM
- 541 Phillips, P.L. Proposal for the use of VISIVE to predict visual performance using image intensifiers. E.Ae.D. Report ST19362, 1977.
MOD, EOD
- 542 Phillips, P.L. An attempt to provide an objective measure of target signature for visual acquisition. Paper presented at the 'Visual Modelling for Operational Research' Symposium, RMCS, Shrivenham, January, 1978.
TCH, TAQ
- 543 Phillips, R.J. Searching for a Target in a Random Arrangement of Names: An Eye Fixation Analysis. Canadian Journal of Physiology/ Review of Canadian Psychology, 1981, 35, 330-346.
VIS, EYM, FIX
- 544 Piper, H.F.; Feindt, K. Voluntary Mediated Abnormal Eye Movements. Ophthalmologica, 1979, 179, 336-346.
EYM, ABN
- 545 Pirozzolo, F.J. The neuropsychology of developmental reading disorders. New York: Praeger, 1979.
PHY, ABN, RED, PSY, BOK
- 546 Pirozzolo, F.J. Saccadic latency and diffuse cerebral atrophy. Paper presented to the Third Annual meeting of the European International Neuropsychological Society. Chianciano, Italy, 1980.
SAC, EYM, ABN

- 547 Pointer, J.S.; Gilmartin, E.; Larke, J.R. A device to assess visual performance with optical aids. TV system. American Journal of Optometry and Physiological Optics, 1981, Vol. 58, No. 5, p.408-13.
INS, EOD
- 548 Posner, M. Abstraction and the process of recognition. In: "Psychology of Learning and Motivation" Volume 3, G. Bower (Ed.), New York: Academic Press, 1969.
PSY, REC
- 549 Potter, M.C. Meaning in visual search. Science, 1975, 187, 965-966.
VIS, PSY
- 550 Poulton, E.C. Peripheral vision, refractoriness, and eye movements in fast oral reading. British Journal of Psychology, 1962, 53, 409-419.
PER, EYM, RED
- 551 Powers, J.R.; Brainard, R.W.; Abram, R.E.; Sadacca, R. Training techniques for rapid target detection. US Army Research Institute for the Behavioural and Social Sciences. Technical Paper 242, 1973.
TRA, TAG
- 552 Prablanc, C. & Jeannerod, C. Corrective saccades: dependence on retinal reafferent signals. Vision Research, 1975, 15, 465-469.
PHY, SAC, EYM, INV
- 553 Prinz, W. Memory Control of Visual Search. In: S. Dornic (Ed.) Attention and Performance, VI. pp. 441-62. Hillsdale: Lawrence Erlbaum Associates, 1977.
MEM, VIS
- 554 Prinz, W. Integration of information in visual search. Quarterly Journal of Experimental Psychology, 1979, 31, 287-304.
VIS, PSY
- 555 Prinz, W. Selectivity in character classification. In: R.S. Nickerson, (Ed.) Attention and Performance VIII. New York: Lawrence Erlbaum Associates, 1980.
PSY
- 556 Prinz, W.; Ataian, D. Two components and two stages in search performance: a case study in visual search. Acta Psychologica, 1973, 37, 218-42.
VIS, PSY

- 557 Prinz, W.; Tweer, R.; Feige, R. Context control of search behavior: Evidence from a "hurdling" technique. *Acta Psychologica*, 1974, 38, 73-80.
CXT, VIS
- 558 Prinzmetal, W. Principles of feature integration in visual perception. *Perception and Psychophysics*, 1981, Vol. 30, p.330-340.
PSY
- 559 Prokoski, F.J.A. A model for human eye movements during viewing of a general, two dimensional, dynamic display. Unpublished doctoral dissertation, University of Connecticut, 1971.
MOD, EYM
- 560 Prokoski, F.J. Modelling the human in visual tasks. Proceedings of the 1972 International Conference on Cybernetics and Society, Washington, DC, 9-12 October 1972, 44-54. New York: IEEE, 1972.
MOD, CTL
- 561 Proskuryakova, N.G.; Shakhovoch, A.R. *Biofizika*, 1968, 13, 117.
SAC, EYM, INV
- 562 Puckett, J. de W.; Steinman, R.M. *Vision Research*, 1968, Vol. 9, p.695.
SAC, EYM
- 563 Rabbitt, P.M.A.; Cumming, G.; Vyas, S. An analysis of visual search: Entropy and sequential effects. In: S. Dornic (Ed.) *Attention and Performance VI*. pp.363-86. Hillsdale: Lawrence Erlbaum Associates, 1977.
VIS, PSY
- 564 Radke, H. A method for semi-automatic analysis of eye movements. National Aeronautics and Space Administration, Washington, DC, Report no. ESA-TT-475, DFVLR-MITT-79-02. June 1980.
INS
- 565 Ranklin, J.E.; Barber, P.J.; Aviss, B.G.L. Peripheral vision monitor: presenting displays at known positions in the visual periphery. *Behavioural Research Methods and Instrumentation*, 1980, Vol. 12, No. 5, p.509-13.
PER
- 566 Rashbass, C. *Journal of Physiology*, 1961, Vol. 159, p.326.
SAC, EYM
- 567 Ratches, J.A. Static performance model for thermal imaging systems. *Optical Engineering*, 1976, 15, p.525.
EOD

- 568 Ratliff, F. Journal of Experimental Psychology, 1952, 43, 163.
FOV, EYM
- 569 Ratliff, F. Mach Bands. San Francisco: Holden-Day, 1965.
INT, BOK
- 570 Rattle, J.D. & Foley-Fisher, J.A. Optical Acta, 1968, 16, 617.
EYM, FOV
- 571 Rayner, K.; Pollatsek, A. Eye movement control during
reading: Evidence for direct control. Quarterly Journal
of Experimental Psychology, 1981, 33A, 351-73.
EYM, RED
- 572 Reicher, G.M. Perceptual recognition as a function of
meaningfulness of stimulus material. Journal of
Experimental Psychology, 1969, 81, 275-280.
REC, PSY
- 573 Reinhart, R.J.; Zuber, B.L. Neural control parameters for
saccadic eye movements. Proceedings of the 23rd Annual
Conference on Engineering in Medicine and Biology,
Washington, DC, 16-19 November, 1970. New York: IEEE,
1970.
PHY, SAC, EYM
- 574 Richards, W. The Influence of Oculomotor Systems on Visual
Perception. Massachusetts Institute of Technology,
Cambridge, Department of Psychology, Final Report, July,
1969.
EYM
- 575 Richards, W. Saccadic suppression. Journal of the Optical
Society of America, 1969, 59, 617-23.
EYM, SAC
- 576 Richards, W.; Kaufman, L. "Center-of-gravity" tendencies for
fixations and flow patterns. Perception and
Psychophysics, 1969, 5, 81-84.
EYM, SAC, STR
- 577 Riggs, L.A.; Niehl, E.W. Eye movements recorded during
convergence and divergence. Brown University,
Providence, RI, 4 May 1960.
- 578 Riva, C.E.; Timberlake, G.T.; Feke, G.T. Laser Doppler
technique for measurement of eye movement. Applied
Optometry, 1979, 18, 2486-90.
INS
- 579 Robinson, D.A. The mechanics of human saccadic eye movement.
Journal of Physiology, 1964, 171-145-264.
PHY, EYM. SAC

- 580 Robinson, D.A. The oculomotor control system: a review. Proceedings of the IEEE, 1968, 56, 1032-1049. EYM, REV
- 581 Robinson, D.A. Progress in models of eye movement control. Proceedings of the 1972 International Conference on Cybernetics and Society, Washington, DC, 9-12 October, 1972, pp. 19-24. New York: IEEE, 1972. EYM, MOD, CTL
- 582 Robinson, D.A. Models of the saccadic eye movement control system. Kybernetik. 1973, 14, 71-83. EYM, SAC, MOD
- 583 Robinson, D.A. The use of control systems analysis in neurophysiology of eye movements. Annual Review of Neuroscience, 1981, 463-504. PHY, CTL
- 584 Robinson, D.A.; O'Meara, D.M.; Scott, A.E.; Collins, C.C. Mechanical components of human eye movements. Journal of Applied Physiology, 1969, 26, 548-53. PHY, EYM
- 585 Robinson, G.H.; Bond, J.R. Visual Dynamics when Interrupting a Control Task to Search for a Peripheral Target. Office of Naval Research, Arlington, VA, Report no. TR-75-21, 15 October, 1975. VIS, PER, HDM
- 586 Robson, J.G.; Graham, N. Probability summation and regional variation in contrast sensitivity across the visual field. Vision Research, 1981, Vol. 21, No. 3, p.409-18. PER
- 587 Rohler, R. The role of eye movements in detection of stationary structures- A theoretical model. Proceedings of the Eleventh Congress of the International Commission for Optics, ICO-11, Madrid, Spain, 10-17 September, 1978, 73-6. Madrid, Spain: Instituto de Optica Daza de Valdes, CSIC, Sociedad Espanola de Optica, 1978. (Std, Book No. 84 600 1317 0). EYM, TAQ, MOD.
- 588 Rosenblatt, F. The Perceptron. Psychological Review, 1958, 5, 386-407. PSY

- 589 Rosenwasser, H.; Chism, G.T.; Morway, P.E. Research needs relating to aircrew visual requirements: Proceedings of the 1979 Symposium held at the National Academy of Sciences, Washington, DC. Naval Air Development Center, Warminster, PA, Aircraft and Crew Systems Technology Directorate, Report no. NADC-79253-60, April, 1979.
VIS, REV
- 590 Roufs, J.A.J. Dynamic properties of vision - 1. Experimental relationships between flicker and flash thresholds. Vision Research, 1972, 12, 261-278.
TCH, THR
- 591 Roufs, J.A.J. Dynamic properties of vision - V. Perception lag and reaction time in relationship to flicker and flash thresholds. Vision Research, 1974, 14, 853-869.
PSY, TCH, THR
- 592 Sakata, H. Mechanism of the Craik-O'Brien effect. Vision Research, 1981, Vol. 21, No. 5, p693-9.
PSY
- 593 Salaman, M. Reports of the committee upon the physiology of vision. VI. Some experiments on peripheral vision. Medical Research Council, Special Report Series No. 136. London: His Majesty's Stationary Office, 1929.
PHY, PER
- 594 Sanders A.F. Information processing in the functional visual field. Institute for Perception, RVO-TNO, Soesterberg (Netherlands), Report no. IZF-1967-6, TUCK-47866, 1967. (In Dutch, English summary).
PSY, PER
- 595 Sansbury, R.V.; Skavenski, A.A.; Haddad, G.M.; Steinman, R.M. Normal fixation of eccentric targets. Journal of the Optical Society of America, 1973, 63, 612-14.
FIX, PER
- 596 Saslow, M.G.; Saslow, C.A. Systematic Biases in Eye Movement Latency Data. Washington University, Seattle, Psychophysics Laboratory, Report no. PRP-27n, 1967.
EYM, MMT
- 597 Saunders, J.E. Foveal and spatial properties of brightness metacontrast. Vision Research, 1977, Vol. 17, p.375.
FOV, TCH
- 598 Scanlan, L.A. Target acquisition model development: effect of realistic terrain. (Cluver City), Hughes Aircraft Company, Report D4977, p.76-484, 1976.
TAQ, MOD, REA

- 599 Scheerer, E. An analysis of practice effects in a continuous visual search task. Psychological Research, 1979.
VIS, TRA
- 600 Schendel, J.D. & Shaw, P. A test of the generality of the word-context effect. Perception and Psychophysics, 1976, 19, 383-393.
RED, PSY, CXT
- 601 Schick, F.V.; Radke, H. A method for semi-automatic analysis of eye movements. In: J. Moraal, K-F. Kraiss (Eds), Manned Systems Design: Methods, Equipment, Applications. New York: Plenum Press, 1981.
INS
- 602 Schiepers, C.W.J. Length estimation of letter strings. IPO Annual Progress Report, 1973, 2, 24-28.
RED, PER
- 603 Schiepers, C.W.J. Response latencies in parvocfeal word recognition. IPO Annual Progress Report, 1974, 9, 99-103.
PER, REC, RED
- 604 Schiepers, C.W.J. Global attributes in visual word recognition. Part 1: length perception of letter strings. Vision Research, 1976, 16, 1343-1349.
RED, REC
- 605 Schifferli, P. Etude par enregistrement photographique de la motricite oculaire dans l'exploration, dans la reconnaissance et dans la representation visuelles. Monatschrift fur Psychiatrie und Neurologie, 1953, 126, 65-118.
VIS, REC, EYM
- 606 Schiller, P.H.; True, S.D.; Conway, J.L. Effects of frontal eyefield and superior colliculus ablations on eye movements. Science, 1979, 206, 590-2.
EYM, ABN, PHY
- 607 Schmidt, D.; Abel, L.A.; Dell'Osso, L.F.; Daroff, R.E. Saccadic Velocity Characteristics: Intrinsic Variability and Fatigue. Aviation, Space and Environmental Medicine, April, 1979, 393-95.
SAC, FAT
- 608 Schneider, G.E. Two visual systems. Science, 1969, 163, 895-902.
MOD

- 609 Schneider, W.; Eberts, R. Automatic Processing and Unitization of Two Features. Illinois University At Urbana-Champaign, Human Attention Research Laboratory, Report no. 8008, February, 1980.
PSY, TCH
- 610 Schneider, W.; Fisk, A.D. Dual Task Automatic and Controlled Processing in Visual Search: Can it be done without cost. Illinois University at Urbana-Champaign Human Attention Research Laboratory, Report no. 8002, 9 February, 1980 .
VIS, PSY
- 611 Schneider, W.; Fisk, A.D. Visual Search Improves with Detection Searches, Declines with Nondetection Search. Illinois University at Urbana-Champaign, Human Attention Research Laboratory, Report no. 8004, 9 February, 1980.
VIS
- 612 Scott, D.M. An Annotated Bibliography (revised) of Research on Eye Movements Published during the Period 1932-62. Report no. DR-52-161. Ottawa, Canada: Queen's Printer and Controller of Stationary, January 1965.
EYM, REV
- 613 Senders, J.W.; Elkind, J.J.; Gringetti, M.C. & Smallwood, R. An investigation of the visual sampling behaviour of human observers. BBN Report 1681, 1965.
EYM
- 614 Senders, J.W.; Fisher, D.F.; Monty, R.A. Eye movements and the higher psychological functions. Hillsdale, NJ: Lawrence Erlbaum Assoc., 1978.
EYM, PSY, BOK
- 615 Setty, K.S.L. The ultimate resolution criterion for out-of-the-cockpit visual scene generation in real time. In: Proceedings of the Seminar on Real-time Signal Processing III, San Diego, CA, July 19-30, 1980, p.61-69. Society of Photo-Optical Instrumentation Engineers, 1980.
AIR, EOD, IMQ
- 616 Shah, A.; Lai, D.C. Monitoring and prediction of saccadic eye movement. Proceedings of the 1975 International Conference on Cybernetics and Society, San Fransisco, CA, 23-25 September, 1975, 222-6. New York: IEEE, 1975.
SAC, EYM, INS
- 617 Shakhovich, A.R. The brain and regulation of eye movement. New York: Plenum Press, 1977.
EYM, PHY, BOK

- 618 Sharpe, J.A.; Troost, B.T.; Dell'Osso, L.F.; Daroff, R.P. Comparative velocities of different types of fast eye movements in man. Investigative Ophthalmology, 1975, 14, 689.
EYM
- 619 Shea, R.A.; Summers, L.G. Visual Detection of Point Source Targets. TRW Systems, Redondo Beach, CA, Report no. NASA-CR-563, September 1966.
REC, STR, VIS, TRA
- 620 Shebilske, W.L. Reading eye movements from an information-processing point of view. In: D.W. Massaro (Ed.) "Understanding language". New York: Academic Press, 1975.
RED, EYM, PSY
- 621 Shebilske, W.L. Directional Scanning biases and shifts of apparent visual direction. Vision Research, 1977, 17, 495-497.
STR, EYM
- 622 Shebilske, W.L. Sensory feedback during eye movements reconsidered. The Behavioural and Brain Sciences, 1978, 1, 160-161.
EYM, PHY
- 623 Sheedy, J.E. The perceived stability of fixation. American Journal of Optometry and Physiological Optics, 1981, 58, 149-54.
EYN, INV
- 524 Sheena, D.; Borah, J. Compensation for some second order effects to improve eye position measurements. In: D.F. Fisher, R.A. Monty, J.W. Senders (Eds.) Eye movements: Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
INS
- 625 Sherr, S. Fundamentals of Display System Design. New York: Wiley-Interscience, 1970.
EOD, BOK
- 626 Shiffrin, R.M.; Gardner, G.T. & Allreier, D.H. On the degree of attention and capacity limitations in visual processing. Perception and Psychophysics, 1973, 14, 131-236.
ATT, PSY
- 627 Shiffrin, R.M.; McKay, D.P. & Shaffer, W.O. Attention to forty-nine spatial positions at once. Journal of Experimental Psychology: Human Perception and Performance, 1976, 2, 14-22.
ATT, PSY

- 628 Shiffrin, R.M. & Schneider, W. Towards a unitary model for selective attention, memory scanning, and visual search. In: "Attention and Performance" VI, V. Dornic, P.M.A. Rabbit (Eds.), New York: Academic Press, 1977.
ATT, MEM, VIS, MOD
- 629 Silbernagel, E.L. Using Realistic Sensor, Target and Scene Characteristics to Develop a Target Acquisition Model. Human Factors, 1982, 24, 321-328.
REA, TCH, TAQ, MOD
- 630 Simon, H.A. & Barenfeld, M. Information-processing analysis of perceptual processes in problem solving. Psychological Review, 1969, 76, 473-483.
PSY
- 631 Simon, J.C.; Crettez, J.P. On some models of the vision of mammals. In - Theories and Applications of Signal Processing. Proceedings of EUSIPCO-80. First European Signal Processing Conference. Lausanne, Switzerland, 16-18 Sept. 1980, p.357.
MOD, PSY
- 632 Simonov, P.V.; Frolov, W.V. Informational need of emotional stress - effect on operator performance of visual tasks. Acta Astronautica, 1981, Vol. 8, p.1043-1049.
PSY, PHY
- 633 Sinclair, J.D. The rest principle. A Neurophysiological Theory of Behaviour. New Jersey: Lawrence Erlbaum, 1981.
PHY, EOK
- 634 Sklansky, J. Medical radiographic image processing and pattern recognition. Proceedings of the 5th International Conference on Pattern Recognition - Miami Beach, FL, USA, 1-4 December, 1980, p.374-82.
VIS, REC, FOR
- 635 Slater, A.M.; Findlay, J.M. The Measurement of Fixation Position in the Newborn Baby. Journal of Experimental Child Psychology, 1972, 14, 349-364.
INS
- 636 Slater, A.M.; Findlay, J.M. The Corneal Reflection Technique and the Visual Preference Method: Sources of Error. Journal of Experimental Child Psychology, 1975, 20, 240-57.
INS, MET
- 637 Slater, A.M.; Findlay, J.M. Binocular Fixation in the Newborn Baby. Journal of Experimental Child Psychology, 1975, 20, 248-273.
FIX

- 638 Sloan, L.L. The photopic acuity-luminance function with special reference to parafoveal vision. Vision Research, 1968, 8, 901-911.
PER, FOV
- 639 Slocum, G.K.; Hoffmans, W.C.; Heard, J.L. Airborne Sensor Display Requirements and Approaches. Information Display, 1967, (Nov./Dec.).
EOD
- 640 Smith, A.T.; Bittencourt, P.R.M.; Lloyd, D.S.L.; Richens, A. An efficient technique for determining characteristics of saccadic eye movements using a mini computer. Journal of Biomedical Engineering, 1981, 3, 39-43.
INS, SAC, EYM, EOD
- 641 Smith, E.E. & Spoehr, K.T. The perception of printed English: A theoretical perspective. In: B.H. Kantowitz (Ed.) "Human processing". New York: Wiley, 1974.
RED, PSY
- 642 Smith, L.J.; Runnels, A.R. The Application of Visual Lobe Search Theory to Air-to-Ground Target Detection. Royal Aircraft Establishment, Farnborough, England, Report No. RAE-TR-68253, October 1968.
AIR, TAG, PER
- 643 Smith, S.L.; Goodwin, K.C. Elink Coding for Information Display. Mitre Corporation, Bedford, Massachusetts, Report no. MTR-1975, October 1971.
EOD, VIS, PSY
- 644 Smyth, S.A. Further analysis of the eye fixation experiment. B.Ae Dynamics Group, (Filton), Report No. ET 10462, May 1980.
EYM, STR, FIX, PIC
- 645 Snow, R.E.; Marshalek, B.; Lohman, D.F. Correlation of Selected Cognitive Abilities and Cognitive Parameters: An Exploratory Study. Stanford University, CA, School of Education, Report no. TR-3, December 1976.
VIS, MEM, MOD, PSY
- 646 Snyder, H.L. Image Quality and Observer Performance. In: L.V. Fieberman (Ed.) Perception of displayed information. New York - London: Plenum Press, 1973.
IMQ
- 647 Snyder, H.L. Visual Search and Image Quality. Virginia Polytechnic Institution and State University, Blacksburg, Department of Industrial Engineering and Operations Research, Final Technical Report, December 1976.
EOD, AIR, TAG, IMQ

- 648 Snyder, H.L.; Keesee.R.; Feaman, W.S.; Aschenbach, J.R. Visual Search and Image Quality. Aerospace Medical Research Laboratory, Wright-Patterson AFB, Ohio, Report, October, 1974.
IMQ, REV, INS, MOD, TAQ
- 649 Snyder, H.L.; Taylor, D.F. Computerized Analysis of Eye Movements during Static Display Visual Search. Virginia Polytechnic Institution and State University, Blacksburg, Department of Industrial Engineering and Operations Research, Interim Report, February, 1976.
VIS, INS
- 650 Sokol, S.; Moskowitz, A. Effect of retinal blur on the peak latency of the pattern evoked potential. Vision Research, (GB), 1981, Vol. 21, No. 8, p.1279-86.
PHY
- 651 Solman, R.T. Relationship between selection accuracy and exposure in visual search. Perception, 1975, 4, 411-418.
VIS, TAC, REC
- 652 Spady, Jr.; A.A. Airline pilots' scan behaviour during simulated ILS approaches. Paper presented at the 2nd US Army Human Engineering Laboratory Conference: Eye Movements and the higher Psychological Processes, Monterey, CA, 1977.
EYM, STR, AIR, EOD
- 653 Spady, Jr.; A.A. Airline pilot scan patterns during simulated ILS approaches. NASA Technical Paper 1250, 1978, 1-69.
EYM, STR, AIR, EOD
- 654 Spillmann, L.; Wooten, B.R. (Eds.) Sensory Experience, Adaptation and Perception. Parts 1, 2, 3, 4, 5, 6. New Jersey: Lawrence Erlbaum, 1982.
BOK
- 655 Spragus, A.B.; Lefton, L.A.; Fisher, D.F. Eye Movements while Reading and Searching Spatially Transformed Text: A Developmental Examination. South Carolina University, Columbia, Final Report, 2 November, 1974.
EYM, RED, VIS, FOV
- 656 Stabell, B.; Stabell, V. Absolute Spectral Sensitivity at Different Eccentricities. Journal of the Optical Society of America, 1981, 71, 841-4.
PER, TCH

- 657 Stark, L. Hierarchical control of eye movements. Proceedings of the IEEE International Conference on Cybernetics and Society, Washington, DC, 1-3 November, 1976, pp. 276-8. New York: IEEE, 1976.
PHY, CTL
- 658 Stark, L.; Ellis, S.R. Scanpaths Revisited: Cognitive Models Direct Active Looking. In: D.F. Fisher, R.A. Monty, J.W. Senders (Eds.) Eye Movements: Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
EYM, STR, PSY
- 659 Stark, L.; Ellis, S.R.; Inone, H.; Freksa, C.R.; Zeevi, J. Cognitive models direct scanpath eye movements. Xll International conference on Medical and Biological Engineering, Jerusalem, Israel, 1979.
STR, EYM, PSY
- 660 St. Cyr, G.J. Signal and noise in the human oculomotor system. Vision Research, 1973, 13, 1979-91.
FIX, TCH, PHY
- 661 St. Cyr, G.J.; Fender, D.H. The interplay of drifts and flicks in binocular fixation. Vision Research, 1969, 9, 245-265.
EYM, INV
- 662 St. Cyr, G.J.; Fender, D.H. Nonlinearities of the human oculomotor system: Gain. Vision Research, 1969, Vol. 9, 1235.
IND, EYM, INV
- 663 Stein, B.E.; Clamann, H.P.; Goldberg, S.J. Superior colliculus: control of eye movements in neonatal kittens. Science, 1980, Vol. 210, No. 4465, p.78-80.
EYM, PHY
- 664 Steinman, R.M.; Cunitz, R.J.; Timberlake, G.T.; Hermann, M. Science, 1967, Vol. 155, p.1577.
SAC, FIX
- 665 Steinman, R.M.; Haddad, G.M.; Skavenski, A.A.; Wyman, D. Miniature eye movement. Science, 1973, Vol. 181, p.810-819.
EYM, INV, SAC
- 666 Steinman, R.M.; Kowler, E. Miniature saccades: eye movements that do not count. Vision Research, 1979, 19, 105-108.
EYM, INV, SAC
- 667 Steinman, R.M.; Stavenski, A.A.; Sansbury, R.V. Vision Research, 1969, Vol. 9, p.629.
SAC, EYM, INV

- 668 Stern, J.A. The Effect of Fatigue on Visual Search Activity. Washington University, St. Louis, MO, Final Report, 1 July, 1972.
REV, INS, VIS, TRA, FAT, VIG, EYM
- 669 Stern, J.A. Aspects of Visual Search Activity Related to Attentional Processes and Skill Development. Air Force Office of Scientific Research, Bolling AFB, DC, Final Report, 31 August, 1980.
FAT, VIG, POV, INS, EYM
- 670 Stromeyer, III, C.F.; Julesz, P. Spatial-frequency masking in vision: critical bands and spread of masking. Journal of the Optical Society of America, 1972, Vol. 62, p.1221.
INT
- 671 Stone, P.T.; Clarke, A.M.; Slater, A.I. The effect of task contrast on visual performance and visual fatigue at a constant illuminance. Lighting Research and Technology, 1980, 12, 144-59.
RED, VIS, TCH, FAT
- 672 Swenson, R.G.; Judy, P.F. Detection of noisy visual targets-models for the effects of spatial uncertainty and signal-to-noise ratio. Perception and Psychophysics, June, 1981, Vol. 29, No. 6, p.521-534.
TCH, TAG, PSY
- 673 Tamura, H.; Bamba, T.; Makikawa, M.; Shimizu, K.; Furukawa, T. Hierarchical control of eye movement with and without visual discrimination task. Proceedings of the International Conference on Cybernetics and Society, Tokyo-Kyoto, Japan, 3-7 November, 1978, 191-5. New York: IEEE, 1978.
EYM, PHY, PSY
- 674 Taylor, J.H. Factors Underlying Visual Search Performance. California University, San Diego, Visibility Laboratory, Report no. NASA-CR-107574, S10-69-22, November, 1969.
VIS, IMQ
- 675 Teichner, W.H.; Mocharnuk, J.B. Predicting Human Performance VII. Visual Search for Complex Targets. New Mexico State University, University Park, Department of Psychology, Report no. NMSU-ONR-TR-74-2, April, 1972.
VIS, TCH, PSY, MOD
- 676 Thackray, R.I.; Touchstone, R.M. Visual search performance during simulated radar observations with and without a sweep-line. Aviation, Space and Environmental Medicine, 1980, 51, 361-366.
VIS, AID

- 677 Thomas, J.G. The dynamics of small saccadic eye movements. Journal of Physiology, 1969, 200, 109-127.
EYE, SAC
- 678 Thomas, J.P. Model of visual detection and discrimination. In: Proceedings of the Human Factors Society 24th Annual Meeting, in Los Angeles, CA, October 13-17, 1980, p.507-510. Santa Monica, CA: Human Factors Society Inc., 1980.
TAQ, MOD
- 679 Tole, J.R.; Harris, R.L.; Stephens, A.T.; Ephratin, A.R. Visual scanning behaviour and mental workload in aircraft pilots. Aviation, Space and Environmental Medicine, 1982, Vol. 53, p.54-61.
EYM, PSY, AIR
- 680 Tole, J.R.; Young, L.R. Digital Filters for Saccade and Fixation Detection. In: D.F. Fisher, R.A. Monty, J.W. Senders (Eds.) Eye Movements: Cognition and Visual Perception. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1981.
INS
- 681 Townsend, J.T.; Taylor, S.G. & Brown, D.R. Lateral masking for letters with unlimited viewing time. Perception and Psychophysics, 1971, 10, 375-378.
RFD, INT, PER
- 682 Turnage, R.E. Jr. The Perception of Flicker in Cathode Ray Tube Displays. Information Display, 1966 (May/June)
EOD, IMC
- 683 Turvey, M.T. Contrasting orientations to the theory of visual information processing. Psychological Review, 1977, 84, 67-68.
REV, PSY
- 684 Turvey, M.T. The thesis of efference-mediation of vision cannot be rationalized. The Behavioural and Brain Sciences, 1979, 2, 59-94.
PHY, PSY, REV
- 685 Tyler, C.W.; Nakayama, K.; Apkarian, P.A.; Levi, D.D. VEP assessment of visual function. Vision Research, 1981, Vol. 21, No. 4, p.607-9.
MET
- 686 Tyler, H.R. Normal and abnormal patterns of visual search. Transactions of the American Neurological Association, 1968, 93, 290-291.
VIS, STR, ABN

- 687 Uttal, W.R. A taxonomy of visual processes. Parts 1 and 2. New Jersey: Lawrence Erlbaum, 1981.
REV, DOK
- 688 Valberg, A.; Olsen, E.T.; Hartlinsen, S. Peripheral contrast reversal inhibits visually evoked potentials in the fovea. Vision Research, 1981, Vol. 21, No. 6, p.947-50.
PER, PHY, FOV
- 689 de Valk, J.P.J.; Eijkman, E.G.J.; Vintcent, J. Detectability index, likelihood ratio and diagnostic output as psychophysical measures for evaluation of medical image processing. Medical and Biological Engineering and Computing, Vol. 1, No. 5, p.597-604.
PSP, IMQ, VIS
- 690 Vanthoor, F.L.J. & Eijkman, E.G.J. Time course of the iconic memory signal. Acta Psychologica, 1973, 37, 79-85.
PSY, MEM
- 691 Vartabedian, A.G. Legibility of symbolism on CRT displays. Applied Ergonomics, 1971, 2, 130-132.
EOD, IMQ, TCH, RED
- 692 Vasudevan, R.; Phatak, A.V.; Smith, J.D. A stochastic model for eye movements during fixation on a stationary target. Kybernetik, 1972, 11, 24-31.
MOD, EYM, PHY, PSY
- 693 Villani, S. A short guide to the recording and interpretation of electro-oculographic response (EOG). Atti Fondazione Giorgio Ronchi, 1978, 33, 62-92.
REV, INS, EYM
- 694 Villani, S. Some ergonomical terms. Visual vs. functional visual field. Atti Fondazione Giorgio Ronchi, 1979, 34, 707-17.
PER, FOV
- 695 Virsu, V. Tendencies to eye movement and misrepresentation of curvature, direction and length. Perception and Psychophysics, 1971, 9, 65-72.
EYM, PSY
- 696 Volkmann, F.C. Journal of the Optical Society of America, 1962, Vol. 52, p.571.
SAC, EYM,
- 697 Volkmann, F.C.; Schick, A.M.; Riggs, L.A. Journal of the Optical Society of America, 1968, Vol. 58, p.562.
SAC, EYM

- 698 Volkmann, J.; Corbin, H.H.; Eddy, R.E.; Coonly, C. Mount Holyoke College, South Hadley, Massachusetts, Final Report, November, 1964.
VIS, TCH, TAC
- 699 Voss, M. Narrowing of the visual field as an indicator of mental workload? In: J. Moraal, K-F Kraiss (Eds.) Manned Systems Design. Methods, Equipment, and Applications. New York and London: Plenum Press, 1981.
PER, PSY
- 700 Vossius, G. The control of eye-movement. Proceedings of the 1972 International Conference on Cybernetics and Society, Washington, DC, 9-12 October, 1972, 27-31. New York: IEEE, 1972.
- 701 Waldram, J.M. Vision and eye movements of motor drivers. The New Scientist, 1960, 2, 1264-67.
EOD, EYM, STR
- 702 Walker, R.S. Simplified methods for determining display screen resolution characteristics. Information Display, 1968 (Jan/Feb).
INS, IMQ, EOD
- 703 Wallis, D. Occupational Psychology in the Sixties; some implications of recent studies of perceptual training and skill. Occupational Psychology, 1963, 37, 237-254.
TRA
- 704 Ward, L.M. & Wetler, D.A. Levels of feature analysis in processing visual patterns. Perception, 1976, , 407-418.
FOR, PSY
- 705 Warner, H.D.; Heimstra, N.W. Effects of intermittent noise on visual search tasks of varying complexity. Perceptual and Motor Skills, 1971, 32, 219-26.
VIS, RED
- 706 Watson, A.P. Probability summation over time. Vision Research, 1979, Vol. 19, p.515.
VIS, MOD
- 707 Webber, R.; Stark, L. Fitting an image to the eye: a conceptual basis for processing radiographs. Oral Surgery, Oral Medicine, Oral Pathology, 1971, 31, 831-837.
IMQ, VIS
- 708 Weber, R.E.; Daroff, R.E. The metrics of horizontal saccadic eye movements in normal humans. Vision Research, 1971, 11, 921-928.
EYM, SAC

- 709 Weber, R.J.; Patrick, C.; Perry, W. Visual search through random walk number fields. Psychonomic Science, 1970, 18, 207-209.
VIS, PED
- 710 Webster, R.C.; Haslerud, U. Influence on extreme peripheral vision of attention to a visual or auditory task. Journal of Experimental Psychology, 1964, 68, 269-272.
PER, ATT, PSY
- 711 Weimer, W.P.; Palermo, D.S. (Eds) Cognition and the symbolic processes (Vol. 1) New Jersey: Lawrence Erlbaum, 1974.
PSY, FOR
- 712 Weimer, W.P.; Palermo, D.S. (Eds) Cognition and the symbolic processes (Vol. 2) New Jersey: Lawrence Erlbaum, 1982.
PSY, FOR
- 713 Weiner, S.; Ehrlichman, H. Ocular motility and cognitive process. Cognition, 1976, 4, 31-43.
PHY, PSY
- 714 Weiss, H. Optimum spot size of a scanned CRT display. Information Display, 1969 (Nov/Dec).
EOD, I.C
- 715 Weisstein, M. & Harris, C.S. Visual detection of line segments: an object-superiority effect. Science, 1974, 186, 752-755.
FOR, PSY
- 716 Werner, J.; Jahns, R.; Wunder, R. Correlation and spectral analysis of voluntary eye movements. Kybernetik, 1972, 11, 86-97.
EYM
- 717 Werner, J.; Vossins, G. The identification of the effective feedback to the saccadic eye movement from the central nervous system. Kybernetik, 1972, 10, 98-102.
EYM, SAC, CTL
- 718 Werner, J.; Wunder, R.; Jahns, R. Investigations of the linearity of the oculomotor system. Kybernetik, 1972, 11, 112-17. (In German).
EYM
- 719 Wertheim, Th. Peripheral visual acuity. American Journal of Optometry and Physiological Optics, 1980, Vol. 57, No. 12, p.915-24.
PER
- 720 Westheimer, G. Mechanism of saccadic eye movements. Archives of Ophthalmology, 1954, 52, 710.
EYM, SAC

- 721 Westheimer, G. Biocybernetics of human eye movements, - an overview. 3rd International Symposium on Biocybernetics, Leipzig, Germany, 3-7 August, 1971, p.1. Leipzig: Carl-Ludwig Institute of Physiology, 1971.
EYM, CTL, REV
- 722 Weymouth, F.; Andersen, E.; Averill, H. American Journal of Physiology, 1923, Vol. 63, p.110.
FOV
- 723 Wheelless, L.L.; Cohen, G.H.; Boynton, R.W. Luminance as a parameter of the eye-movement control system. Journal of the Optical Society of America, 1967, 57, 394-400.
EYM, TCH
- 724 Wheelless, L.L.; Boynton, R.W. & Cohen, G.H. Eye movement responses to step and pulse-step stimuli. Journal of Optical Society of America, 1966, 56, 956-960.
EYM, TCH
- 725 White, C.T.; Eason, R.C.; Bartlett, K.R. Latency and duration of eye movements in the horizontal plane. Journal of the Optical Society of America, 1962, 52, 210-213.
EYM
- 726 White, M.J. Response selection and visual search. Bulletin of the Psychonomic Society, 1981, 201-202.
VIS, PSY
- 727 Widdel, H.; Kaster, J. Eye movement measurement in the assessment and training of visual performance. In: J. Moraal and K-F. Kraiss (Eds.), Manned Systems Design: Methods, Equipment and Applications. London: Plenum Press, 1981.
EYM, TRA
- 728 Wilkinson, H.P. Eye movements measured with a solid state photodiode matrix. Behavioral Research Methods and Instrumentation, 1979, 11, 429-32.
INS
- 729 Williams, A.R.; Fender, D.H. The synchrony of binocular saccadic eye movements. Vision research, 1977, 17, 303-6.
EYM, SAC
- 730 Williams, A.R.; Goddard, C.J.; Seidenstein, S. Applications of principles of visual perception in displays for complex man-machine systems. S.I.D. International Symposium, 1981. Digest of Papers, Vol. XII.
EOD

- 731 Williams, L.G. Visual Search: Eye Fixations as determined by Instructed Target Characteristics. Honeywell Inc., St. Paul, Minnesota, Report no. T-125, August 1965.
VIS, FIX, TCH
- 732 Williams, L.G. A Study of Visual Search using Eye Movement Recordings. Honeywell Inc., Minnesota, Systems and Research Division, Report no. 12009-IR-3, March, 1967.
VIS, TCH
- 733 Williams, L.G.; Jack, W.H.; Shonz, W.D.; Hawthorne, D.; Juola, J. A study of visual search using eye movement recordings: Validation studies. Honeywell Inc., St Paul, Minnesota, Research Department, Report no. 12009-IR4, 20 June, 1964.
PER, TCH, MOD
- 734 Williams, M.; Weisstein, N.; Brown, J. Enhancement processes in the visual detection of barely perceptible targets. In: Proceedings of the Human Factors Society 24th Annual Meeting, Los Angeles, CA, Oct. 13-17, 1980, p.521-525. Santa Monica, CA: Human Factors Society Inc., 1980.
TCH, TAQ, AID
- 735 Wilson, H.R.; Bergen, J.R. A four mechanism model for threshold spatial vision. Vision Research, 1979, 19, p.19.
MOD, THR
- 736 Wyman, D.; Steinman, R.M. Latency characteristics of small saccades. Vision Research, 1973, 13, 2173-5.
TCH, SAC, EYM
- 737 Wolbarsht, M.L.; O'Foghludha, F.A.; Sliney, D.H.; Guy, A.W.; Smith, A.A. Jr.; Johnson, G.A. Electromagnetic emission from visual display units: a non-hazard. Proceedings of the Society of Photo-Optic Instrumentation Engineering: Ocular Effects of Non-Ionizing Radiation. Washington, DC, USA, April 1980, Vol. 229, p.187-95.
EOD, FAT
- 738 Wolfe, J. Relationship of cerebellar potentials to saccadic eye movements. Brain Research, 1971, 30, 204-207.
SAC, EYM, PHY
- 739 Wolford, G. & Hollingsworth, S. Lateral masking in visual information processing. Perception and Psychophysics, 1974, 16, 315-320.
INT, PER
- 740 Woodworth, R.S. Experimental Psychology. New York: Holt, 1938.
PSY, INT, BOK
- 741 Woodworth, R.S. & Schlosberg, H. Experimental Psychology. London: Methuen & Co., Ltd., 1954.
PSY, BOK

- 742 Wurtz, R.H.; Albano, J.E. Visual Motor Function of the Primate Superior Colliculus. Annual Review of Neuroscience, 1980, 189-226.
PHY
- 743 Wurtz, R.H.; Mohler, C.W. Selection of visual targets for the initiation of saccadic eye movements. Brain Research, 1974, 71, 209-214.
SAC, EYM, TCH
- 744 Yarbus, A.L. Eye movements and vision. New York: Plenum Press, 1967.
BOK
- 745 Yuille, J.C. (Ed.) Imagery, Memory and Cognition. New Jersey: Lawrence Erlbaum, 1982.
PSY, ECK
- 746 Zavalishin, N.V. Hypothesis concerning the distribution of eye fixation points during the examination of pictures. Automatic Remote Control, 1968, 29, 1944-1951.
FRE, PIC, EYM, FIX, MOD
- 747 Zeevi, Y.Y.; Peli, E. Latency of peripheral saccades. Journal of the Optical Society of America, 1979, 69, 1274-9.
PER, SAC, EYM
- 748 Zeevi, Y.Y.; Peli, E.; Stark, L. Study of eccentric fixation with secondary visual feedback. Journal of the Optical Society of America, 1979, 69, 669-75.
PHY, PER, TRA, STR, IND, FIX
- 749 Ziedman, K.; Sharma, S.; Niemann, R.A. Computerized data acquisition and analysis of visual search behavior in a simulated driving situation. Proceedings of the Human Factors Society 19th Annual Meeting, Dallas, Texas, October 14-16, 1975. Santa Monica, CA: Human Factors Society, 1975.
VIS, INS
- 750 Zigler, H.J.; Cook, E.; Miller, D.; Wemple, L. The perception of form in peripheral vision. American Journal of Psychology, 1930, 42, 246-259.
FOR, PER
- 751 Zinchenko, V.P.; Chzhi-Tsin, V.; Tarakanov, V.V. The formation and development of perceptual activity. Soviet Psychology and Psychiatry, 1963, 2, 3-12.
PHY, PSY, DEV

- 752 Zuber, E.L.; Stark, L.; Cook, G. Microsaccades and the velocity amplitude relationship for saccadic eye movement. Science, 1965, Vol. 150, p.1459.
SAC, EYM
- 753 Zusne, L.; Michels, K.M. Non-representational shapes and eye movements. Perceptual and Motor Skills, 1964, 18, 11-20.
EYM, FOR, STR
- 754 Zwahlen, H.T. Driver eye scanning behavior at tunnel approaches. Paper presented at the Second Conference on Eye Movements and Psychological Processes, Monterey, CA, February 7-9, 1977.
EYM, STR

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Abstract Over 700 references describing past work related to eye movements and visual search are listed and qualified using a keyword system. The bibliography is intended as the starting point for a research programme on visual search for military targets viewed through electro-optical imaging systems.				

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